Indiana University School of
informatics
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Informatics Researchers Take the LEAD in Hurricane Prediction

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The IU School of Informatics offers an academic path for students from diverse backgrounds who are seeking careers that combine information technology with another area of study. Just as the discipline of informatics operates in a variety of contexts, the School of Informatics has programs on a growing number of IU campuses. The curriculum focuses on both the technical and human aspects of problem solving and emphasizes innovation and teamwork. The school understands the role of research in building a world-class faculty and in recruiting and educating outstanding students, but also places a primacy on its role in creating new knowledge and technologies for the betterment of people everywhere. The school also is firmly committed to collaboration with industry and government in order to hold up its side of the "three-legged stool" that supports economic growth and progress.

Cover: A sample of the LEAD project's 3-D animation simulation of Hurricane Katrina battering New Orleans (story on page 2).
Back cover: VisionFest 2005 winning entries. Cover design by Markus Creasy.

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Computer science strengthens informatics

Dear Informatics Alumni,

This issue of *Informatics* commemorates yet another historic first in the history of the School of Informatics at Indiana University. Effective July 1, 2005, the Department of Computer Science officially moved from the Bloomington College of Arts and Sciences to the School of Informatics — a move that creates even greater opportunities for our students and new synergies among our faculty. I have been a professor of informatics only since 2000, but I have been a professor of computer science since 1989, so I am personally delighted by this union. This change took place only at IUB. At IUPUI, the Department of Computer and Information Science stays in the Purdue School of Science and continues to collaborate with us in various ways, including having several joint appointments.

What is "informatics"? (Believe me, I get this question often.) The word "informatics" was introduced in the 1960s (independently, and more or less simultaneously) by American Walter F. Bauer, Frenchman Phillipe Dreyfus ("informatique"), and Russian A.I. Mikhailov ("informatika"). For Bauer and Dreyfus, informatics derives from the combination of "information" and "automatic" and means information processing. For Mikhailov, the word derives from "information" and the "tic" found in "aeronautics," "arithmetic," etc., which comes from the Greek word for theory. Informatics in Europe, France and Germany particularly, is more or less synonymous with computer science. At Indiana University, the word was chosen to mean the application of information technology to the arts, sciences, and professions, and its uses in organizations and societies at large, and conforms to an emerging common usage in the United States and the United Kingdom. As such, computer science is a core component of informatics.

We have developed a little joke that I will share with you as family members. It is expressed in an equation: InformatiCS = Informati + CS!

The equation is a picture of the importance of computer science to informatics. The addition of computer science, in many ways, anchors our curriculum and gives meaning to the whole.

Taking our lead from the equation, we've begun to use the term "informati" as a nickname to refer to those faculty members who don't also hold a title in computer science, or new media, or health information administration. And the term seems to fit well. We also enjoy noting that "informati" is a word in Italian along the lines of "literati." The last means the literary elite, and the first then means something like the information elite.

The Department of Computer Science was founded in 1969, whereas the School of Informatics opened its doors in the fall of 2000 (and also has operations on the Indianapolis and South Bend campuses of Indiana University). Now the School of Informatics at IUB has well over 60 faculty who cross a wide range of disciplines and "multi-disciplines," including the following:

Computer Science:

- Artificial intelligence and cognitive science
- Database and information systems
- Distributed and parallel systems
- Formal methods for system design, hardware, and robotics
- Foundations: theory of computing, algorithms, applied logic
- Graphics and visualization
- Programming languages and compilers

Informatics:

- Bioinformatics
- Chemical informatics
- Complex systems, networks, modeling, and simulation
- Cybersecurity
- Discovery and application of information
- Human-computer interaction design
- Logical and mathematical foundations of informatics
- Music informatics
- Social and organizational informatics

While there are clearly a few areas of overlap, you can see that, roughly speaking, by combining informatics and computer science in Bloomington, we have doubled the numbers of research areas and faculty, and we have — overnight — become one of the largest and most comprehensive schools of information technology in the country. This is a very exciting and strategic move on the part of Indiana University, and I want to compliment those who made this possible, including Kumble Subbaswamy, dean of the College of Arts and Sciences; and Ken Gros Louis, Bloomington chancellor and interim vice president for academic affairs of Indiana University.

So now the Indiana model for informatics truly embraces a complete spectrum of information technology, from theory to practice, from science to art, from computer science to life science to media arts and science. It's my pleasure to be the first to say to our computer science alumni, faculty, students, and staff: Welcome to the School of Informatics — and welcome home.

Informatics takes the LEAD

by Joe Stuteville

In a perfect world, there would not be any perfect storms. No tornados would ever form and touch down, cutting a deadly swath through whole communities. No monstrous typhoons or hurricanes with innocent names like "Katrina" and "Rita" would slam into coasts, leaving unfathomable loss of life and property under floodwaters.

Welcome to our not-so-perfect world, where some scientists are hard at work trying to find ways to better predict large-scale weather events, and where IU School of Informatics researchers have a major role. They are part of the Linked Environments Atmospheric Discovery project to create a high-speed computing and network infrastructure that will help meteorologists make more timely and accurate forecasts of hurricanes, tornadoes, and other dangerous weather conditions. The national effort seeks to build a "faster-than-real-time" system that could save lives and help the public take cover and safety officials better prepare for looming natural disasters.

Dennis Gannon, PhD, is IU's principal investigator and is joined by co-principal investigator Beth Plale, PhD. Both are faculty members in the School of Informatics' Department of Computer Science.

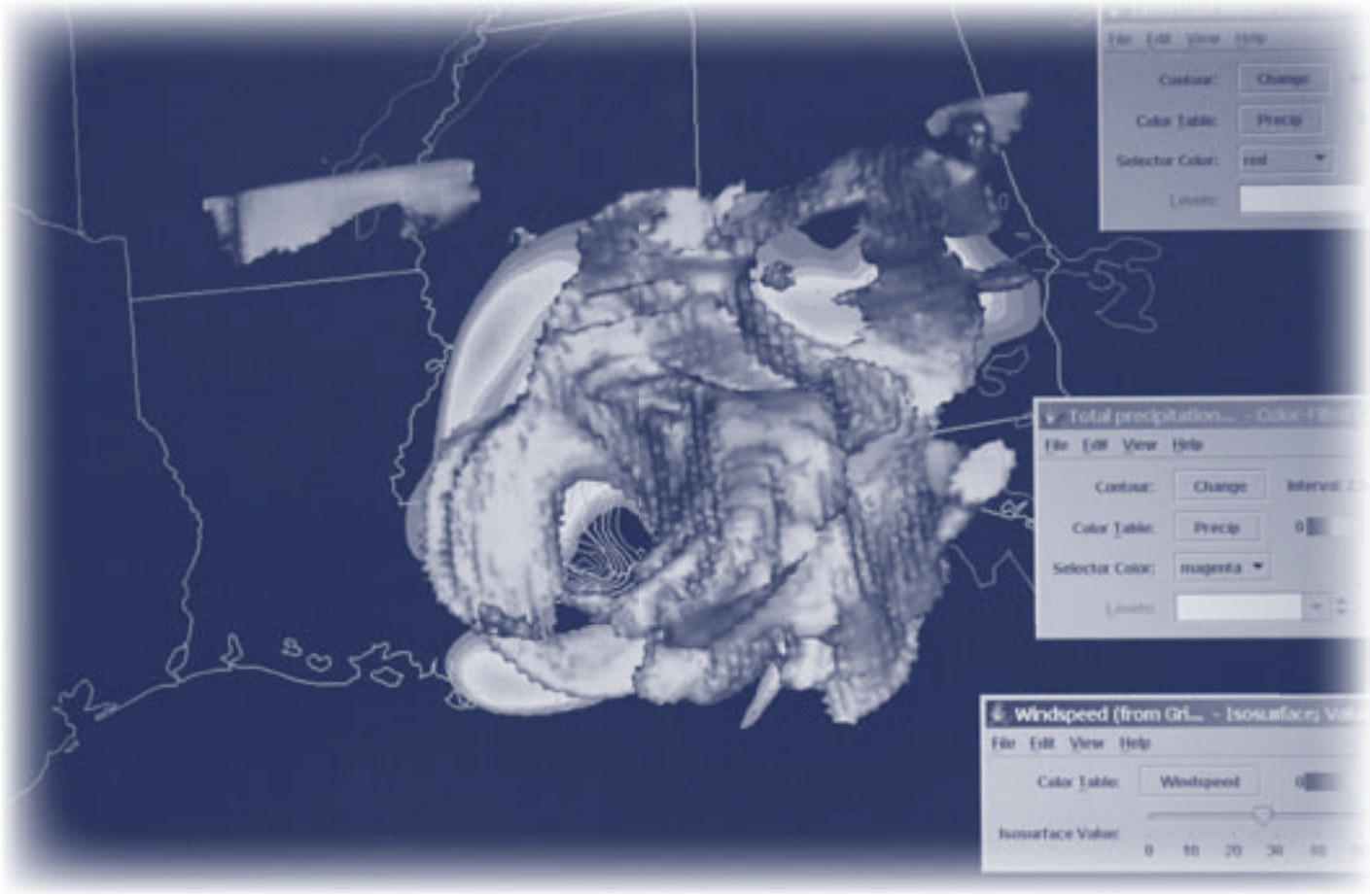
Other institutions involved in LEAD are the University of Oklahoma (lead institution), Howard University, Colorado State University, Millersville University, the University of Alabama, the University of Illinois, the University of North Carolina, and the University Corporation for Atmospheric Research–Unidata Program.

LEAD is funded by an $11 million grant from the National Science Foundation. IU recently received an additional $2 million NSF grant for its participation in the TeraGrid project to support LEAD and other "science gateways." The funding comes on the heels of IU's receiving $4.4 million from the NSF to help improve TeraGrid, an advanced national computing network that allows scientists across the nation to share data and collaborate.

"Our goal is to build an adaptive, on-demand computer and network infrastructure that responds to complex weather-driven events," says Gannon, professor of computer science. "A typical scenario will involve constant monitoring of stream data from ground sensors detecting humidity, wind, and lightning strikes."

Doom with a view

Suresh Marru stares intently at the computer monitor as Hurricane Katrina bears down on New Orleans and nearby coastal



This image of Hurricane Katrina was generated by tools from the LEAD project. LEAD users simulated weather by a Weather Research and Forecasting model run with a simple mouse from the LEAD portal. The output is then visualized by a tool called Data Viewer, developed by Unidata in Boulder, Colo. (one of the LEAD collaborators), producing the resultant 3-D animation.

areas. He "lifts" the swirling mass and rotates it three-dimensionally to get a better view of its dynamics and patterns. As he works with the simulation of Katrina, another storm, Rita, is slouching toward Texas and Louisiana. Marru has to work with the imagery of this past storm and cannot access real-time data — LEAD researchers at other locations need the network to analyze what's happening with Rita.

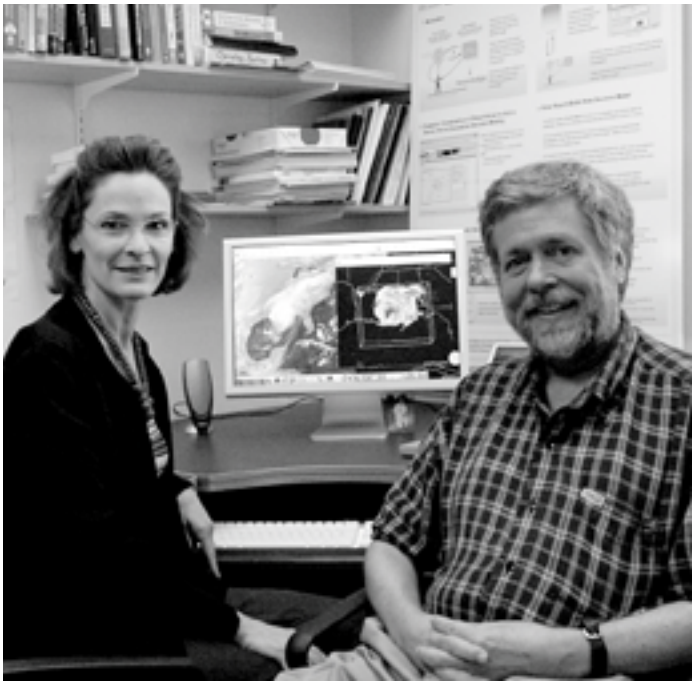
The LEAD system pools and analyzes data received from other sources such as satellites, visual reports from commercial pilots, and NEXRAD, a network of 130 national radars that detect and process changing weather conditions. "Data mining tasks will compare this data to historic patterns," says Plale, assistant professor. "When the conditions are right for the formation of a severe storm, the system will be able to launch hundreds of simulations at the same time. This results in a far more accurate forecast."

As additional sensor information becomes available, it will be used to kill off simulations that no longer have value, refocusing the system's ability to process finer-grid simulations that are more realistic. Newer and smaller NEXRAD radars now under development will provide weather information more rapidly and further narrow simulations. "The result, for example, would be a prediction of a tornado that is accurate and timely enough to save lives," Gannon says. "This scenario is well beyond the state of the art."

Such forecasts would be of tremendous value for government and public safety officials who plan recovery support for disasters such as Hurricane Katrina, adds Plale. "A more accurate forecast also can reduce the uncertainty administrators face when issuing evacuation orders."

Less predictable perhaps than the nature of tornados and hurricanes is how people will respond when faced with looming cataclysmic storms. "We have to become more accurate in our predictions of major adverse weather and certainly more far-reaching in gauging how people will react," Gannon says. "In the wake of Katrina and Rita, I expect more attention will be focused on storm modeling and forecasting."

For more information about the LEAD project, go to http://lead.caps.ou.edu/index.htm.



Beth Plale and Dennis Gannon

The LEAD team

Several members of the School of Informatics' Department of Computer Science are assisting with the Linked Environments for Atmospheric Discovery, including

- Marcus Christie, portal developer, grid manager;
- Suresh Marru, portal developer;
- Aleksander Slominski, orchestration;
- Sangmi Lee Pallickara, data, my LEAD;
- Scott Jensen, data;
- Yiming Sun, data;
- Yogesh Simmhan, data;
- Gopi Kandaswamy, portal;
- Liang Fang, portal security;
- Satoshi Shirasuna, orchestration;
- Yi Huang, orchestration, portal; and
- Ning Liu, data

Making history

Computer science joins School of Informatics

In a historic move this past July, the deans of the College of Arts and Sciences and the School of Informatics formally transferred the Bloomington Department of Computer Science to the School of Informatics.

The move is expected to mutually enhance the reputation of the Bloomington Department of Computer Science and the School of Informatics. The addition of computer science will enable the School of Informatics to build its reputation on the human- and domain-centered informatics (like bioinformatics) in collaboration with strong foundations, systems, artificial intelligence/cognitive science, e-science, databases, and programming languages. In turn, the Department of Computer Science will be enhanced by being in such a unique environment.

According to Dean Michael Dunn, researchers around the world have noticed the development and rapid success of the School of Informatics. "The addition of computer science will add to the school's attractiveness and should help the university as a whole to attract outstanding faculty. It's another step forward in establishing IU as a national leader in the creative use and application of information technology," Dunn said.

The move should make Indiana University more successful in recruiting and retaining students with skills in information technology by providing a well-recognized academic path for the study of IT. The union also improves the School of Informatics' ability to place those students in jobs at graduation and thus fulfill its mission to the state of Indiana. Employers will be able to easily identify a robust resource for recruiting highly skilled IT professionals in the School of Informatics.

The School of Informatics is unusual among its peers, having been founded whole rather than by reorganization. Some technology schools have grown out of computer science and engineering programs — these are sometimes called C-schools. Other technology schools have grown out of reorganized library and information programs. These are sometimes called I-schools. Now, with the addition of computer science after informatics has been well-established, the School of Informatics might be dubbed an

IU Archives 95/022

1964: Students analyze output from the Control Data Corporation 3600 at the Research Computing Center. At this time, the center was located in the basement of the School of Health, Physical Education, and Recreation building.

I/C school, where the "I" stands for informatics.

"This move will benefit everyone by enhancing the ability of the faculty to take advantage of their many common interests, leading to fruitful collaborations and strengthening the school as a whole," said Andrew Hanson, chair of the Department of Computer Science. The Bloomington Department of Computer Science was founded in 1969 and includes 31 faculty members. More than a dozen of these have joint appointments in computer science and informatics or are full-time faculty in one unit with formal affiliations in the other. The size of the combined school is now comparable to the size of Purdue's pioneering computer science department.

Computer science will become the school's first department. Though not formally a department, the New Media Program at IUPUI is a well-developed program with a distinctive faculty and culture within the school.

In Bloomington, all but one computer science degree are now administered through the School of Informatics. As a liberal arts degree, the bachelor of arts in computer science will continue to be awarded by the College of Arts and Sciences.

The union affects only the Department of Computer Science in Bloomington. At IUPUI, the Computer and Informatics Science Department is part of the School of Science. At IU South Bend, informatics degrees are administered by the School of Liberal Arts in their Department of Computer Science.

IU Archives 95/022

1964: Franklin P. Prosser, lecturer in computer science, holds a module of the Control Data Corporation 3600 at the Research Computer Center. In 1971, Prosser served as the first chair of computer science.

About the Department of Computer Science at IUB

The Department of Computer Science on the Bloomington campus was founded in 1969 as a program in the Indiana University College of Arts and Sciences. George Springer was program director. The program grew rapidly and formally became a department in 1971, with Frank Prosser serving as the first chair. The department is now a mature unit, having experienced a number of cycles of growth.

On July 1, 2005, Dean Michael Dunn and Department of Computer Science Chair Andrew Hanson hosted a reception in Lindley Hall for students, faculty, and staff in celebration of the official transfer of computer science to the School of Informatics.

Fast facts about the department

Chair: Andy Hanson

Number of alumni:	2,854
Number of undergraduate majors:	135
Number of MS students:	51
Number of Phd students:	139
Number of Faculty:	31

Academic options:

- Associate of Arts in Computer Science
- Bachelor of Arts in Computer Science
- Bachelor of Science in Computer Science
- Master of Science in Computer Science
- Professional Master's in Computer Science (combining the B.S. and M.S. in five years of study)
- PhD in Computer Science

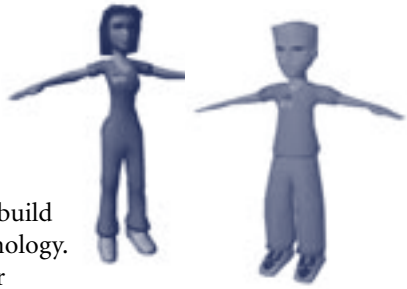
Location:

Lindley Hall, Bloomington campus

Research groups:

- Artificial intelligence and cognitive science
- Database and information systems
- Distributed and parallel systems
- Formal methods for system design, hardware and robotics
- Foundations: theory of computing, algorithms, applied logic
- Graphics and visualization
- Programming languages and compilers

Medical simulation game a groundbreaking learning tool



You are a young resident physician in a large urban hospital, and it's your first day on the job: You are making your rounds when Mrs. White decides to leave the hospital — with or without your permission. You were headed for your first real break in 10 hours when you see her pushing her IV unit toward the elevator and threatening a nurse. Now what?

Managing difficult patients and impossible schedules is one of the hardest things medical interns have to master. Now, students in medical residency can practice their patient-relation skills virtually — before finding the real Mrs. White at the elevator. With the help of a pioneering medical simulation game, MedSim, residents can practice real-world scenarios in a fun learning environment.

Durwin Talon, associate professor of new media, and Dr. Deanna Willis from the IU School of Medicine combined new media and medical expertise to create MedSim, an innovative learning tool that helps residents measure their skills in three critical tiers: money, interpersonal relationships, and time management. The game play is logical, challenging students to solve increasingly detailed problems to progress through the levels while engaging them in a humorous role-playing situation. It also provides a valuable measurement tool for both the residents and their mentors.

And, MedSim does include a humorous element. Afflictions like Elvis Disease and Disco Fever mimic real medical situations while providing some escape from reality for the players — a break from studying that reinforces serious concepts.

The project design was guided by a handful of driving principles. MedSim was to be informative but not patronizing to the players. It had to be something students would want to work on outside the classroom. Most important, the end product should allow students to confront real-world problems and practice their responses in a safe virtual environment.

While the imaginary medical conditions are often amusing, they also allow for scalability. The rapid pace of medical advances and discoveries means that terminologies can become quickly obsolete. The tongue-in-cheek names that have been used to illustrate diseases, however, will remain timeless.

MedSim was created with an object-oriented program, an aspect of its construction that allows for future expansion and promotes spontaneous game play. This method ensures that components can be swapped out in the future and large databases of potential objects can always be resourced for a fresh experience. And, because the characters change from day-to-day due to this construction, the game is new and interesting with each game. The engine for the game was developed using the popular and very flexible Unreal engine. Unreal is a very successful game that many students were already familiar with, and, with the help of Mike Rein at Epic Games, the New Media Program was able to build on this already prolific technology.

MedSim is a single-player experience within one wing of a virtual hospital, but there are plans to branch into multiplayer online environments with many wings. Instructors currently can view the players' scores and provide direction for supplemental material if there are areas that need some work. Plans for future versions of the simulations allow faculty to assume roles in the game and interact with other players. The richness of the experience will be further enhanced by opening it to online play so that a player from IUPUI can interact with players from anywhere around the world. The potential for a global learning community is endless.

"We were in a unique position to develop such a simulation," said Talon. "We were able to pull together a variety of skill sets because of the nature of informatics at IUPUI."

The proximity of the New Media Program and the IU School of Medicine allowed for a collaboration that was dynamic and productive. Willis put together a team of doctors to guide the content and target audience of the project, and Talon was able to assemble a team of new-media students — or, as Talon prefers to describe them, fellow designers, programmers, and artists. It took six weeks for the team to create and program two characters that could recognize each other in the game. With that feat, more than half of the major programming was finished. The project has provided students the opportunity to understand how vital teamwork is in a large-scale project such as this, as well as the experience of being involved in an endeavor that has the potential for far-reaching positive impact.

Since the fall of 2004, seven teams of new-media students have worked on the project, pooling their skills in animation, programming, interface design, artwork and modeling, database design, game level design, sound and music, and project coordination. Talon credits the success of the project in part to the "amazing array of skill sets and knowledge" of the students. This large-scale project, which is currently ready for beta testing, was accomplished with funding from the School of Medicine and SBC.

MedSim contributors

Programming leads: Ryan Christy, Jason Silverman
Programmers: Michael Klingmann, Jonas Thorsten
Art lead: Fredrik Skarstedt
Character design/models: Matt Bell, Michael Davison, Michael Henderson, Lindsey Hughey, Jon Lanker
Database: Guin Thompson
Animation: Mark Casselman, Jason Guy
Level design lead: Greg Lindquist
Level planning: Danielle Sevastianos
Level assets: J.B. Buckner, Sabrina Fowler, Steve Hicks
Sound lead: Rob Guernsey
Interface lead: Mark Creasy
Project coordinator: Kira Peavley

IUPUI addressing shortage through distance education

There are approximately 4,000 fewer HIA graduates each year than are needed to meet the employment needs in the field of health information management in the United States. The Indiana University HIA program is addressing this critical shortage with a new distance education initiative and by launching two new certificate programs.

By spring 2006, the HIA program will make the degree program more accessible to non-traditional students by offering a distance education option online. The majority of the required courses for the professional program will be available online, making the degree accessible to a broad range of students. Course lectures will be available via the Web or CD-ROM, though some laboratory portions of the HIA curriculum and professional practice experiences will still require that students be present in either a classroom or clinical facility.

Two new certificates are also being created in response to high market demand. The certificates in medical coding and cancer registry are designed as stand-alone certifications or for students who wish to augment their primary degree program. Both certificate programs require significant coursework in the HIA professional program and prerequisite coursework in the areas of anatomy, physiology, informatics, and organization/management. Courses completed from either program may be applied to a bachelor of science in health information administration.

Upon completion of the medical coding certificate, students are prepared to find employment in a hospital or physician's office and will be eligible for "certified coding associate" certification by the American Health Information Management Association.

Students completing the cancer registry certificate are eligible for certified tumor registry certification by the National Cancer Registrars Association and are equipped to find employment in a hospital or cancer treatment program.

HIA Connection

The Office of Campus and Community Life on the IUPUI campus recently gave approval for the Health Information Administration Connection, a student organization for those interested in the HIA program. The HIA Connection hopes to promote the HIA major, provide additional opportunities for educational and professional development to members, and assist students in exploring scholarship opportunities.

Some of the group's most recent activities include participation in the Weeks of Welcome Student Involvement Fair at IUPUI, which is aimed at orienting new students to the campus. As a part of Health Information Privacy and Security Week, the organization coordinated a luncheon and program, which included a presentation on résumé building by Stephanie Braun from the Student Career Center at IUPUI. In addition, the HIA Connection also was involved in a Peanut Butter Drive, benefiting infants, children, and women in Haiti.

The students of HIA Connection are hard at work planning opportunities for HIA students to interact with experts in the areas of networking, employment opportunities, and continuing education initiatives that encourage graduates to pursue master's degrees in the field.

For more information, e-mail healthco@iupui.edu.

IU, UB, UW found nation's first honors society for informatics

The deans of three IT schools have announced the formation of the nation's first national honors society for informatics. Iota Nu Phi was founded by the Indiana University School of Informatics, the School of Informatics at State University of New York Buffalo, and the Information School at the University of Washington. The honors society recognizes outstanding students and alumni and will offer a collaborative atmosphere for scholars and professionals in the emerging field of informatics.

The society's alpha chapter was established at Indiana University Bloomington's School of Informatics and will induct its first members spring 2006. State University of New York at Buffalo's School of Informatics has established the society's beta chapter. The board of directors includes the deans of the three founding schools: *chair*, J. Michael Dunn, dean of the School of Informatics, IUB; *chair-elect*, W. David Penniman, dean of the School of Informatics, State University of New York, Buffalo; *vice chair*, David McDonald, Informatics Program chair, The Information School, University of Washington; plus *executive director*, Susan Quinn, assistant dean, School of Informatics, IUB.

Colleges and universities that grant baccalaureate or advanced degrees in informatics or related areas are eligible to establish local chapters who petition for membership in the national society. While the society's national constitution offers a framework for chapter proceedings, local chapters are free to function in accordance with their own needs. Local chapter responsibilities include establishing and enforcing chapter bylaws, electing officers, initiating new members annually, reporting to the national office annually, and undertaking programs to promote Iota Nu Phi goals.

School of Informatics founds Science Informatics Advisory Board

The School of Informatics has named 11 founding members to its Science Informatics Advisory Board. The board members, representing diverse applications of IT in the sciences, will meet once each year to discuss and counsel the school on its science informatics programs. Among the many issues they will consider are research and development, technology and support, curriculum, advancement, and collaborations.

Advisory board members

- Malorye A. Branca, senior informatics editor, *Bio-IT World*
- Jeremy Frey, Department of Chemistry, University of South Hampton
- Vance Kershner, president and CEO, LabWare Inc.
- Caroline A. Kovac, general manager, IBM Healthcare and Life Sciences
- Rudy Potenzone, senior vice president, business development and strategic planning, Ingenuity Systems
- Lura Powell, president and CEO, Advanced Imaging Technologies
- John Reynders, information officer, discovery and development informatics, Eli Lilly & Co.
- Rick Roberts, executive director, worldwide head of informatics strategy development, Pfizer Inc.
- Ray Salemme, CEO, Linguagen
- Mick Savage, consultant, former president and CEO, Molecular Simulations (now Accelrys)
- MaryJo Zaborowski, senior vice president and global head of research informatics, Roche Pharmaceuticals

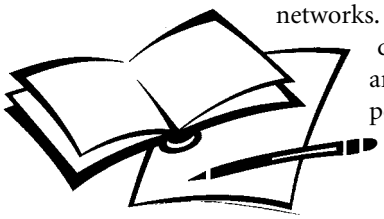
Informatics approved on four more campuses

The Indiana Commission for Higher Education voted to approve the bachelor of science in informatics as a degree that can be offered by Indiana University's East, Kokomo, Northwest, and Southeast campuses. Informatics is already available at Bloomington, Indianapolis, and South Bend.

In keeping with its mission to provide technology-related education to all of Indiana, the School of Informatics will seek to launch the degree programs as soon as possible.

IU offers nation's first informatics PhD degree

The School of Informatics is now admitting students to the nation's first PhD program in informatics. The program offers tracks in bioinformatics, chemical informatics, health informatics, human-computer interaction, and social informatics. Additional tracks are planned for cybersecurity, new media, music informatics, complex systems, modeling, and networks. Graduates of the doctoral program are expected to take positions in higher education or work in industry.



School of Informatics mourns loss of mentor, friend

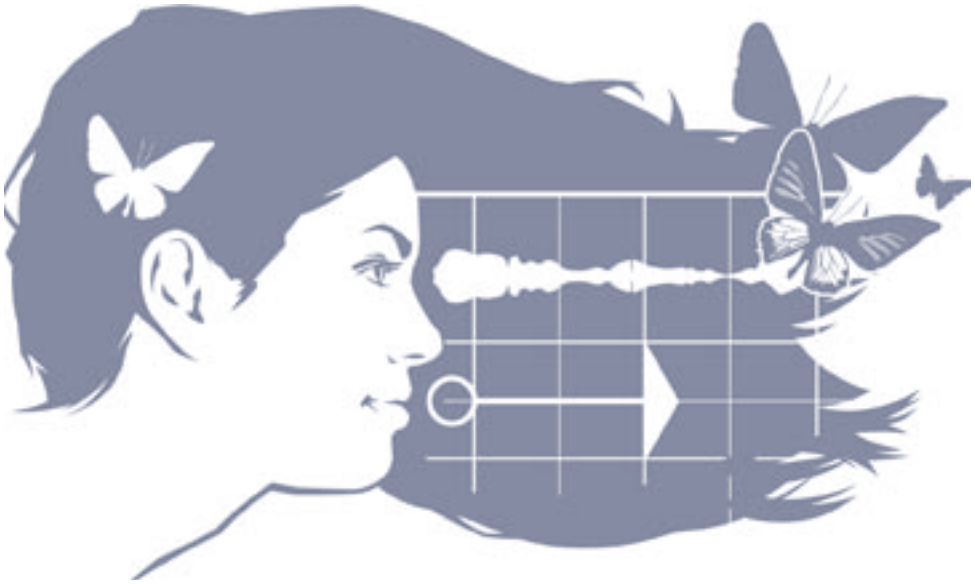
The School of Informatics suffered a great loss Feb. 7, 2005, with the death of David Max Ratts, academic adviser to junior and senior students at IUPUI. More than an adviser, Ratts was a mentor, counselor, teacher, confidant, sounding board, and guide — sometimes a disciplinarian and always an advocate for his students. Above all, Ratts was a kind and committed individual who loved his work. It was a great source of joy for him to witness students he knew so well achieve their goals and begin journeys toward accomplishing so much more. His ability to discern, reflect, and encourage his students' passions endeared him to all who had the pleasure of sitting across his desk from him.

Ratts's passions extended beyond the university and encompassed art in many forms. A graduate of North Central High School, he attended Ball State University and achieved a master's degree in music and drama at Butler University. He started the Metropolitan Music Fair and later taught music at Carmel High School, where he founded the singing group the Ambassadors. Over the years, he worked with Footlight Musicals, Black Curtain Dinner Theater, the Phoenix Theater, and the Warren Performing Arts Center. He was active with the Indianapolis Opera Company and Indianapolis Opera Theatre. He worked for 18 years at the Indianapolis Civic Theatre as business manager, conductor, stage director, choral director, and director of Kid Connection, a tri-state adult acting troupe that played to elementary students and tackled topics like the environment and substance abuse. Ratts was known for his work as musical director of *Miss Muffet* with Ginger Rodgers and Josh Logan. He was house manager of Indiana Repertory Theatre and active in the McCallister Opera Awards.

David Ratts

A scholarship has been established in Ratts's memory at the IU School of Informatics Indianapolis campus. Certainly, for those who worked closely with him, Ratts will never be forgotten.

VisionFest 2005: They came. They saw. They competed.



Student animators from England, Canada, Australia, Panama, Japan, Iceland, and the United States were among the first to compete at VisionFest, a student-only animation competition presented by the School of Informatics at IUPUI last June. The event was designed to challenge and inspire animation students and provide them with opportunities to meet visionaries and industry leaders.

Students from high school through graduate school submitted more than 100 entries to the VisionFest competition in the categories of sequential art, simulation/visualization, 2-D animation, and 3-D animation. Industry experts reviewed entries and offered written critiques. Finalists in each category were presented at an open screening where audiences cast votes for their favorite submissions.

John Canemaker, internationally recognized animator and animation historian, delivered the keynote address. Canemaker, a professor and director of the animation program at New York University Tisch School of the Arts, began making films in 1973. He has served as creative consultant and commentator for several DVD releases, including *Snow White and the Seven Dwarfs, Dumbo, The Fanatasia Anthology, Peter Pan*, and *Winsor McCay: The Master Edition*. Canemaker's body of work includes commercial projects such as *The World According to Garp* (Warner Bros.); the Academy Award-winning *You Don't Have To Die* (HBO); and the Peabody Award-winning *Break the Silence: Kids Against Child Abuse* (CBS). As a key figure in the development of independent animation in America, Canemaker's personal short films are part of the permanent collection of the Museum of Modern Art.

John Canemaker

Distinguished industry leaders presented on topics such as visualization and simulation, sequential art, 2-D animation, and 3-D animation. Industry participants included Zareh Gorjian (NASA Jet Propulsion Laboratory), Michael Stribling (Visual Concepts Entertainment and 2K Sports), Bob Schreck (Batman group editor at D.C. Comics), Matt Wagner (D.C. Comics), Scott and Georgia Ball (The Animation Closet), Eric Radomski (Warner Brothers Animation and phuuz entertainment), and Rich McKain (Blue Sky Studios).

Indianapolis industry representatives shared their work and vision at the Indiana Gallery Presentation. Participants included Jason C. Zickler and Josh Neimark of Pathway Productions; Bryan Gray and Brian Phillips of MediaSauce; and Greg Phillips and Mike Root of Gabriel Entertainment. Students participated with these professionals in a portfolio development program and the student interaction/roundtable.

Real Life 101 Conference: Helping students prepare

Representatives from some of the top technology firms in central Indiana came to the IUPUI campus in April to share real-world experiences with students and to discuss the skills that are important for success in these competitive fields. *Real Life 101: Preparing for Life after College* was a free full-day conference that brought students in informatics, new media, computer science, and computer technology together with technology-based companies for a discussion of the trends that are shaping the careers of graduates of these programs.

Students honed important skills like interviewing, negotiating, and portfolio building and were encouraged to come with questions to gain insight from leaders within the technology industry.

The event was sponsored by the School of Informatics in conjunction with the Informatics Women's Organization, the Informatics Student Government, the Association for Computing Machinery club, and the IUPUI Solution Center.

Real Life 101 participating companies included Autobase, Crew Technical Services, Eli Lilly, Gabriel Interactive, MediaSauce, Quest Information Systems, Thomson Electronics, and Zent Consulting.

Professor shares U.S. HIA best practices in Taiwan

Danita Forgey is at the forefront of the ever-evolving field of HIA. So, when former student Hsyien-Chia Wen began seeking a presenter with expertise in hospitals for a meeting of the Taiwan Medical Record Association in Taichung, he naturally remembered his former teacher and mentor, Professor Forgey.

Forgey, Health Information Administration Program director and assistant professor for the School of Informatics, IUPUI, traveled to Taiwan in April to present three workshops on topics within the field of health information management. Over the course of five days, she presented at the Mackay Memorial Hospital in Taitung, at the Wan Fang Hospital in Taipei City, and for the Taiwan Medical Record Association in Taichung.

Forgey was invited by Hsyien-Chia Wen, a former student in the HIA professional program in 1991–92. Wen, a native of Taiwan, currently lives in Taipei and is an assistant professor at the Graduate Institute of Health Care Administration at the Taipei Medical University. Forgey and Wen worked for several months to plan presentations that would address prospective payment for hospital inpatients. Wen also translated all workshop materials.

Forgey spoke on government insurance oversight in the United States and its relationship to coding and Diagnostic Related Groups. The discussion outlined the evolution of quality and reimbursement monitoring and centered on current measures in place to promote quality care and payment practices in the United States. Associated topics included the effect of DRG implementation on the profession, current challenges to coding and reimbursement today, and the policies and best practices that are reshaping today's approach to the field of health information administration.

Danita Forgey with her hosts in Taiwan

New faculty welcomed on Bloomington, IUPUI campuses

Peter Todd, an expert in complex systems, artificial life, and cognitive science, joined the Bloomington faculty this fall as a professor in informatics and cognitive science. Todd received a PhD in psychology at Stanford University in 1992 and completed postdoctoral research in computer modeling of cognition and behavior at the Rowland Institute for Science.

For nearly a decade, Todd served as second-in-command at the Max Planck Institute for Psychological Research, where he helped co-found the institute. Over the years, he helped to shape the institute's research directions and guide many postdoctoral researchers and predoctoral students. He also serves as editor in chief of the journal *Adaptive Behavior* and has authored or coauthored a number of books and publications.

Felisa Tennant was named clinical assistant professor in the School of Informatics, Health Information Administration Program. She has served as a lecturer in the Health Information Administration Program, instructing HIA students in forms design, record retention and storage, and release of information, as well as a medical coding certificate class instructing students on ICD-9-CM and CPT coding. She holds a master of information science from the School of Library and Information Science, Indiana University (2001), and a BS in health information administration from the School of Allied Health Sciences, Indiana University (1997).

Raquel Hill has been named assistant professor of computer science and informatics on the Bloomington campus. Hill earned BS and MS degrees in computer science from the Georgia Institute of Technology in 1991 and 1993, respectively. From 1993 to 1996, she was a member of the scientific staff at Nortel Networks in RTP, North Carolina. In November 2002, she received a PhD in computer science from Harvard University. Hill was a lecturer in the School of Electrical and Computer Engineering at Georgia Tech from November 2002 to August 2003. From August 2003 to July 2005, she was a postdoctoral research associate at the University of Illinois Urbana–Champaign, with a joint appointment with the Department of Computer Science and the NCSA.

Hill's research interests include developing security protocols and mechanisms for wired and wireless infrastructures. She has specific interests in developing context-based security mechanisms that leverage the use of context in environments where the context may change frequently (i.e., pervasive computing environments).

Matthew Hahn received a BS in biology with honors from Cornell University in 1998. In 2003, he

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New faculty

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earned his PhD in biology from Duke University. Hahn undertook a National Science Foundation postdoctoral fellowship in bioinformatics at the University of California, Davis, from 2003 to 2005.

Hahn joined the faculty at IU Bloomington as an assistant professor in informatics and biology this fall. His research focuses broadly on evolutionary genomics to ask questions about organismal function and evolution. Using computational, statistical, and empirical methods, his research examines genomic variation both within and between species to study the roles of natural selection and genetic drift in molecular evolution.

Eden Medina has been named assistant professor of informatics on the Bloomington campus. She completed a dissertation on the "History and Social Studies of Science and Technology" and received a PhD from MIT in 2005. She earned undergraduate degrees in electrical engineering and women's studies at Princeton University. Her work addresses the historical development of information technologies in Latin America, particularly the role these technologies have played in creating new forms of governance and advancing state ideological projects.

Medina's broader interests include the study of information technologies in the non-Western world and how analyses of technology in these regions can further our understanding of historical processes. She has received grants from the Social Science Research Council and the American Council for Learned Societies, the National Science Foundation, and the Charles Babbage Institute and has spent the past two years as a graduate fellow at the Dibner Institute for the History of Science and Technology. Before pursuing her PhD, Medina worked as an electrical engineer specializing in image processing and machine vision.

Jeffrey Bardzell received his PhD in comparative literature in 2004 at Indiana University, where he also received his master's degree. He joined the Bloomington faculty this fall as assistant professor. He has designed, developed, and consulted on several large learning and e-learning projects for the Indiana Department of Education, IU's University Information Technology Services, the School of Health, Physical Education, and Recreation, and Macromedia Inc.

He has authored dozens of books and articles on topics including e-learning application development, education policy, ancient epic, and multimedia authoring, writing for such publishers as O'Reilly, Macromedia Press, Wiley, and Corwin.

Bardzell leverages research and practice from a number of fields, including the philosophy of language, ancient and medieval literature, postmodern critical theory, semiotics, multimedia authoring, and learning theory to discover the phenomenological relationships between media and consciousness.

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Siegel named executive associate dean for informatics at IUB

Marty Siegel

Marty Siegel was named executive associate dean for Bloomington programs. Siegel oversees graduate studies and research at IUB and is a professor of informatics, cognitive science, and instructional systems technology. As executive associate dean, he takes on an expanded administrative role in support of the informatics University Dean J. Michael Dunn.

A pioneer in the field of computer-based learning, Siegel has worked for Microsoft, Authorware (now Macromedia Inc.), the University of Illinois, the Computer-based Education Research Laboratory, and on the PLATO system. In addition, Siegel also founded Indiana University's first start-up company, WisdomTools, in 1999.

Siegel's research interests include design of digital learning environments, e-learning, new collaborative discussion spaces, visualization tools for time- and space-based data, and the development of personal learning assistants.

Stolterman named director of human-computer interaction design

The School of Informatics in Bloomington named Erik Stolterman the director of the human-computer interaction design program. Stolterman, head of the Department of Informatics at Umeå University, Sweden, joined Indiana University this fall.

An acclaimed leader in his field, Stolterman earned his PhD in informatics from Umeå University in 1991. Since, he has served as professor and head of the Department of Informatics and on steering committees for Umeå's Virtual Reality Lab, Computing Center, and Center for Interaction Technology. Stolterman's research focuses on interaction design; information systems design and management; information technology and societal change; Net-Life studies; and the philosophy, theory, and methodology of design. He has research affiliations with several U.S. universities and lived for some time in Seattle, where he worked with researchers at the University of Washington, Antioch University, and Evergreen State College. He has published widely in influential national and international journals and has authored or co-authored several books.

As director of the HCID program, Stolterman will play a significant role in the development, coordination, and expansion of the existing undergraduate and master's programs and will guide the research programs and future curriculum development for the PhD degree program. Stolterman takes over the reigns from Martin Siegel, executive associate dean, who has served as interim director of the HCID program for the past year.

New media reaching out through community service projects

One of the core principles of an education in media arts and science at the IU School of Informatics is the idea of community service. Working closely with not-for-profit organizations in the community, instructors for many new media courses tailor projects to the needs of these real-world clients. Several courses have consistently incorporated this type of project into the coursework — sometimes as early as the freshman level. These projects have an impact within the community and across the state. Here, we will profile two examples of how new media students have helped to build a partnership between the program and the community: the Indy in Motion Project and the Indiana Perinatal Network Resource.

Indiana Perinatal Network Resource

Course: N503 Digital Media Application Design Processes
Project title: Indiana Perinatal Network Resource CD
Team members: Cathy Babcock, Vanlianpar Bualteng, Devi Haripal, Jolene Kernick, Beth Lykins, Uniqah Muzaffar, Kim Vo
Team mentor: Dan Baldwin
Project description: For this project, students were asked to create a freestanding Flash-based interactive resource compact disc that the Indiana Perinatal Network could send to county health departments across the state. This resource CD needed to include written documents and pamphlets, public service announcement samples in both video and audio format, poster and billboard samples, and various forms and procedures lists, along with contact information about how to obtain full versions of some of the sample content on the CD.

After many meetings with the clients to ensure that the users' needs were being met, the groups presented their projects to several representatives from the IPN who then chose the interactive resource CD that most suited their needs. As is usual in a project of this magnitude, some of the clients' needs changed between the time the project was launched and the time that the CD was actually implemented. So, after the close of the semester, Dan Baldwin and Beth Lykins addressed the changes and delivered the final version of the CD, which is now being used in county health departments across the state.

Indy in Motion Project

Course: N101 Topics in Interactive Media
Project title: Indy in Motion Web site
Team members: Bob Alley, Drew Clyngenpeel, Woo Lee, Evan Wages
Team mentors: Dan Baldwin, lecture; Beth Lykins, lab
Project description: The goal of this project was to create a Web site for Indianapolis Mayor Bart Peterson's fitness initiative "Indy in Motion."

Several groups presented their designs to Steve Campbell, director of media relations with the mayor's office, and he was impressed with the quality of work that came from this entry-level class. Students presented a design for the homepage and one interior page, allowing the client to envision how the site would look upon implementation.

To prepare for the project, students created detailed strategic plans that explored such areas as target audience, content, the overall feel or "attitudes" the site should convey, the single message the viewer should take from the site, and other potential vehicles for reaching the target audience, such as radio spots or television ads. The plan also compared the site with others that share the same target audience so that the client could see how the new site would stack up to the competition.

Upon being presented with the research and designs, the client selected the design that was most in keeping with the fresh and energetic approach that Mayor Peterson and his media relations team wanted to portray. The final version can be viewed at www6.indygov.org/mayor/fitness/.

New faculty

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Other interests include approaches to integrating diverse information-media experiences, narratological approaches to interaction design, and the emerging field of ludology (the study of game and other play activities).

Predrag Radivojac, has been named assistant professor of informatics on the Bloomington campus. Radivojac completed his dissertation on "Classification and Knowledge Discovery in Protein Databases" and received a PhD from Temple University in 2003. His research interests are primarily focused on bioinformatics, machine learning, and data mining. Specifically, he focuses on prediction of protein features and analysis of molecular-biology data.

To learn more about our faculty, visit

http://informatics.indiana.edu/people/faculty.asp

New staff in Bloomington, Indianapolis welcomed

Albert Cheng has taken a position as a systems support specialist in Bloomington. Cheng is a graduate of informatics, having received a BS in 2005.

Elisabeth Hinshaw-Osgood joined the School of Informatics as the graduate program coordinator for Indianapolis. She has extensive professional experience in academic administration, advising, and international education with both graduate and undergraduate students. Prior experience in international student and study-abroad advising, along with academic credentials, prepared her as an advocate for graduate students in the School of Informatics. Hinshaw-Osgood received an MS in library science at IUPUI in 2001. She also holds a master of international administration degree from the School for International Training/World Learning and a BA in French from California State University.

Jim Engel, CPA, is the new fiscal officer for the School of Informatics in Bloomington. Engel brings to the school impressive experience as a fiscal professional with extensive IU experience at the cyclotron and FMS. As fiscal officer, under the supervision of CFO Jim Buher, Engel is responsible for the management of all Bloomington financial matters, including oversight for the business office and contracts and grants.

Neal Moore joins the staff of the School of Informatics as the director of community relations on the Indianapolis campus. Moore received an MS in media arts and science from the School of Informatics in 2004. Most recently, Moore was a vice president with Sease, Gerig & Associates, Indianapolis, providing clients with public relations counsel and crisis-communication training, as well as producing corporate marketing videos. He also serves as a founding member of the informatics alumni board.

Neal Moore

Moore has had a number of high-profile clients, including the *Dick Lugar Run & Walk*, Mayor Stephen Goldsmith, Christian Theological Seminary, Comcast, and the U.S. Grand Prix. Moore has taught broadcast journalism courses at Anderson University and performs on-camera and voice talent work.

Jasmine Pagel has joined the informatics communications staff in Bloomington as communications assistant and writer. Pagel was formerly promotional services editor and writer at AuthorHouse in Bloomington and a staff reporter at the *Evening World* newspaper.

Susan Quinn, assistant dean, was also formally named as director of communications for the School of Informatics system wide. She served as fiscal officer during the first five years of the school's history while also serving as assistant dean and managing communications. The change reflects the phenomenal growth enjoyed by the School of Informatics in the past five years.

Jason Sisk joined the School of Informatics as webmaster on the IUPUI campus. Sisk was previously employed as the manager of information technology at the Indiana University Cancer Center. He has extensive experience building large-scale Web sites, including coding for Web sites and server management. Sisk is an IU alumnus, receiving a BA in journalism (Indianapolis) in 2000. He received an MS in media arts and science from the Indiana University School of Informatics (Indianapolis) in 2003.

Joe Stuteville brings extensive experience in reporting and feature writing to the School of Informatics as coordinator of media relations. Stuteville was formerly the news media liaison at the IU School of Medicine in Indianapolis and editor and writer of its alumni magazine, *IU Medicine*.

As a UPI reporter and editor in chief at the *American Legion Magazine*, Stuteville has covered a wide variety of news topics, including medical human interest and research, political, national defense, and veterans' issues. In 1991, he covered the Persian Gulf War in Saudi Arabia, Iraq, and Kuwait and has won various awards for newspaper and magazine writing. His wife, Lannae Stuteville, is an IU graduate and teaches English at an Indianapolis public high school. They have four children and four grandchildren.

From the development office

Spirit of Philanthropy 2005

At the annual Spirit of Philanthropy Luncheon, IUPUI Chancellor Charles R. Bantz honored individuals, corporations, and foundations who have contributed to IU programs through their generous gifts and voluntary services. The School of Informatics honored Don Aquilano, managing director, Gazelle TechVentures Inc., as a recipient of the 2005 Spirit of Philanthropy Award in recognition of his service to the School of Informatics as a founding member of the Dean's Advisory Council. The school also honored Professor Emerita Mary McKenzie, who served as program director of the health information administration program for 29 years of the program's 55-year history. Ann Rugg accepted the award on behalf of McKenzie.

Each year, campus units are invited to nominate outstanding members of the community for recognition. In honoring the Spirit of Philanthropy recipients, the campus and communities are reminded of the importance of philanthropy and voluntarism to our university, community, and civic life.

Earnhart awarded OfficeWorks scholarship

IUPUI freshman Ryan Andre Earnhart has been named the recipient of the OfficeWorks Informatics Scholarship. He will receive $2,500 to attain a bachelor's degree in informatics or media arts and science.

Indianapolis-based company OfficeWorks and the School of Informatics announced the creation of the undergraduate scholarship last year. The scholarship is to benefit an IUPUI freshman pursuing a degree in informatics or media arts and science. The award was designed to encourage students who are Indiana residents of Hispanic descent and who have a record of academic excellence.

Earnhart, of Milford, Ind., is currently a student in the New Media Program and hopes to work in computer animation. In 2004, Earnhart graduated in the top 10 percent of his class at Wawasee High School. He is the oldest of three children and has been active in his church for more than 13 years. At IUPUI, he is involved with Campus Outreach. Earnhart plans to graduate in 2008.

OfficeWorks is one of the first companies to respond to a scholarship program initiated by the School of Informatics to encourage the business community to invest in the technology education of Indiana students from underrepresented groups.

"With the help of OfficeWorks, informatics can advance its mission to attract and graduate students from underrepresented populations into technology fields," said Darrell L. Bailey, executive associate dean for the IU School of Informatics in Indianapolis.

Locally owned and operated, OfficeWorks is the only minority-owned, certified Herman Miller dealership in Indiana. OfficeWorks has offices in Indianapolis and Lafayette and provides office furniture products and services.

McLaughlin named first Guidant Foundation fellow

Mary McLaughlin, a health informatics graduate student at IUPUI, has been named the recipient of the first Guidant Foundation Fellowship at IUPUI. She will receive $15,000 to further her study in informatics. A second fellowship recipient will be chosen in 2006.

The Guidant Fellowship was created to support research and the study of knowledge discovery in data (KDD) within the field of health informatics. KDD is a research area involving the application of knowledge discovery techniques to health data. This includes work with knowledge representation and the management of health databases.

McLaughlin earned her bachelor's and master's degrees in dietetics and her MBA from Ball State University and now works for Roche Diagnostics in Indianapolis. She worked as a clinical dietician for 10 years and in benefits/health promotions with Indiana Gas. At Roche, she worked in both benefit administration and design and is currently focusing on integrating employee medical and pharmacy claims data with worker's compensation and health assessment data.

The master of science in health informatics at Indiana University–Purdue University Indianapolis includes research and educational programs in medical, nursing, and health informatics.

McLaughlin pursued an informatics degree to continue her professional development. "I realized the limitations of my skills and decided that the informatics program was perfect to match my passion for analysis and driving health outcomes," McLaughlin said.

Guidant Corp. established the Guidant Foundation in 1995 as a way of giving back to the communities where they have employees and to charitable and educational programs that fulfill its philanthropic mission. The foundation is a separate, nonprofit charitable organization supported by contributions from Guidant Corp.

School of Informatics honors undergraduate scholarship recipients

Five undergraduate scholarship recipients were honored by the School of Informatics in January. This scholarship celebration brought together recipients, their families and friends, scholarship donors, and School of Informatics faculty, staff, and advisory board members. Dean Michael Dunn spoke in honor of the event.

"We are very pleased to encourage these students on their academic journey toward a highly rewarding career in technology," said Dunn.

Three Indiana University freshmen formally received the Dean's Undergraduate Award, a $1,000 four-year renewable scholarship established by the dean of the School of Informatics. Recipients are required to remain full-time students at IU Bloomington, declare and remain informatics majors, progress toward certification into informatics, and maintain a cumulative grade point average of 3.0. Recipients include Ian Blackwood, of Hammond, Ind.; Amanda Dennis, of Ellettsville, Ind.; and Anna Landis, of Greenwood, Ind.

IU sophomore Joshua Manns was honored with a $9,000 ArvinMeritor Informatics Scholarship. The scholarship was first created in 2004 and is reserved for a sophomore pursuing a degree in informatics at the Bloomington campus. The three-year scholarship provides $3,000 per year for informatics study. Preference is given to Indiana residents from underrepresented groups who have a record of academic excellence. ArvinMeritor was one of the first companies to respond to an IU informatics scholarship program,

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Student news

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which encourages the business community to invest in the technology education of Indiana students.

Another IU Bloomington sophomore, Jeffrey Gehlhausen, received the Telamon Informatics Scholarship. This award is given in the amount of $1,000 to an undergraduate student currently enrolled in the School of Informatics who has a record of academic excellence, demonstrated by a grade point average of 3.5 or higher. Telamon, an Indianapolis-based business, is a minority-owned company that provides a variety of services to the telecommunications industry and its customers.

Chemical informatics student meets president

Graduate student Manojkumar D. Jain had a once-in-a-lifetime experience in July, when he spoke with President George W. Bush at the 35th Indiana Black Expo Corporate Luncheon. Gov. Mitch Daniels invited President Bush to speak at the event, which is held annually in Indianapolis to honor businesses receptive to black issues and hosts business leaders from all over the state.

Jain is currently a master's candidate in the chemical informatics program at IUPUI. He was awarded the MDL Excellence in Informatics Fellowship in 2003 and plans to defend his thesis this fall. He has conducted independent study on molecular modeling and serves as a research associate for Ariel Fernandez, with whom he is studying a new structural feature for proteins called dehyron and its significance as a marker in drug design.

Jain holds a bachelor's degree in chemical engineering from the University of Mumbai (previously Bombay), India, and a postgraduate diploma in information technology from IIIT, Bangalore. He has also completed a distance-learning program in bioinformatics from the Bioinformatics Institute of India, Noida. Before coming to Indianapolis, Jain was employed as a systems analyst at CrimsonLogic India, a Singapore-based IT consulting firm and application service provider.

"I have been in a photograph in the newspaper in Indianapolis, and I have been for split second on local NBC news, but this tops it all," said Jain. "To be so close to the president of the most powerful nation in the world is exciting!"

Knopp receives Ratts scholarship

The School of Informatics, IUPUI, named Ryan Knopp, a senior in the New Media Program, as the first recipient of the David M. Ratts New Media Scholarship. Knopp, a resident of Shelbyville, Ind., will receive $1,000.

The scholarship was created in memory of the late David M. Ratts, a respected junior/senior adviser at the School of Informatics on the Indianapolis campus. Ratts won numerous awards for his student advising and mentoring and was an active member of the National Academic Advising Association. He was familiar to most incoming freshmen as the instructor of the First-Year Experience courses.

Family members of David Ratts, from left, niece Fiona Inglis, sister Phyllisanne (Ratts) Inglis, and mother Frances Ratts with David M. Ratts New Media Scholarship winner Ryan Knopp

In honor of Ratts's commitment to new media students at IUPUI, the award supports students who have completed the first semester of their junior year. Preference is given to candidates with a record of academic excellence as demonstrated by a minimum grade point average of 3.5. Knopp, 21, who plans to graduate from IUPUI in 2006, enjoys creating digital art and "tinkering" with computers. He currently works as a Web developer at Tubesock Inc.

Gunn Forum sponsored by HIA

The Gertrude L. Gunn Forum, sponsored by the School of Informatics' Health Information Administration Program, was held last April in Indianapolis. Guest speaker Durwin Talon, associate professor for the School of Informatics' New Media Program, presented "Developing People Skills in a Virtual Environment." The presentation described his work on a simulation project, a joint venture with the IU School of Medicine that involves the production of a medical simulation game. The game is intended as a study tool for medical students in their residency to practice real-world scenarios (see page 6).

Lindsey Lawton, left, and Rebecca Bennett

Scholarship awards were presented to several HIA students. Winners of the Van Ausdall and Farrar Scholarship were Rebecca Bennett, Stela Hinova, and Lindsey Lawton. Bennett and Hinova also received Gertrude L. Gunn Memorial Fund Scholarship Awards. Lawton was awarded the Mary L. McKenzie Scholarship. Emmanual Akosa was the winner of the Elton T. Ridley Scholarship and the GTM Consultants Inc. Scholarship.

Stela Hinova and Emmanuel Akosa

Commencement at IUB

Bloomington celebrated the fourth class of informatics graduates this past May. State Rep. Matt Pierce greeted graduates at a formal awards dinner on the eve of Commencement ceremonies. He praised the pioneering spirit of informatics students and commended their families for helping the graduates realize their dreams.

This year, the school awarded 118 bachelor's degrees, 12 master's degrees in human-computer interaction, and eight master's degrees in bioinformatics.

Nine students were recognized for graduating with academic distinction. Timothy Ray Fleener II was honored for graduating with highest distinction. The school acknowledged that 29 teams presented senior capstone projects at the annual Informatics Capstone Fair and made awards to the five most compelling projects of 2005.

Top: IU Bloomington graduates, from left, Yogita Mantri, Sumit Middha, Rupali Patwardhan

Bottom: IU Bloomington graduate Jonathan Wayman

Faculty and associate instructors were also recognized at the event. Professor Dennis Groth was recognized as the recipient of a prestigious campus honor, the 2005 Trustees Teaching Award for informatics. Professor Christine Ogan received the 2005 Faculty Teaching Excellence Award. Also receiving honors this year were Mehmet Dalkilic, named by the Student Alumni Association as the winner of a Student Choice Award, and Filippo Menczer, recipient of the Teaching Excellence Award in computer science. Associate instructors Matt Weldon and Troy Church were named recipients of the 2005 Associate Instructor Teaching Excellence Award.

Commencement at IUPUI

Commencement ceremonies for IUPUI students were held on May 8, 2005, in the RCA Convention Center, Indianapolis. This was the sixth year for the School of Informatics ceremony, which honored December 2004 and May, June, and August 2005 graduates. Three associate's degrees, 82 bachelor's degrees, and 40 master's degrees were conferred. Notably, 23 undergraduates were recognized as graduating with distinction, each having earned a cumulative grade point average of 3.5 or higher. This year also marked the first year master of science degrees have been awarded in the health informatics, human-computer interaction, and laboratory informatics programs.

The ceremony provided the opportunity to recognize exemplary work of educators and students within the School of Informatics. Faculty members Mary Ellen Reed and Clinton T. Koch each received the Indiana University Excellence in Teaching Award. Barbara Howrey, who earned a bachelor of science degree in informatics, was also recognized for having been named one of the top 100 students at IUPUI by the Alumni Advisory Council and the Student Organization for Alumni Relations. Also recognized was David Ratts, junior/senior student adviser, who died in February. Ratts was honored for his service and commitment to the university, and the first David M. Ratts Memorial Scholarship was presented.

Chris Meyer/ IU Home Pages

Chad Back, BS'05, informatics, was selected to carry the school banner at the IUPUI Commencement this past May in recognition of his perfect 4.0 GPA. Back, the information technology manager for Hurco Companies Inc., completed his degree taking classes in the evening.

Commencement at IUSB

The informatics program at IU South Bend celebrated Commencement May 10. Bradley Jones and Thomas E. Taylor were awarded bachelor's degrees in informatics, becoming the second "class" to graduate from the program. In December 2004, IU South Bend recognized its first informatics graduate, Robert Prange, who serves as technical support for the South Bend School Corp.

The informatics degree program was established at IU South Bend in 2002 in collaboration with the Department of Computer Science located within the College of Liberal Arts and Sciences. The program is headed by interim director Ruth Schwartz and currently has more than 20 majors. Several students are also enrolled in the informatics minor and the post-baccalaureate certificate.

New media alumnus creates new media for IUPUI

Steve Hodges, BS'04, media arts and science, has accepted a position that will allow him to give back to the university. Hodges is now the electronic visual coordinator for the Office of Communications and Marketing at IUPUI. In this role, he will upgrade the look of IUPUI in all electronic forms and help ensure consistency in branding, tone, and architecture and design.

Beth Lykins

Steve Hodges

Hodges's initial focus was the redesign of the IUPUI home page, as well as the Office of Admissions and Office of Financial Aid sites. He developed and implemented a new layout and design for many sections of these sites, using sound information architecture and user-centered design principles to deliver the finished product.

Hodges has also worked to add value to the IUPUI site by bringing interactivity and 3-D rendering to the IUPUI campus maps. To view these projects, visit www.iupui.edu/tour/ and choose from four virtual tours of the IUPUI campus (Flash Player Version 7.0 required), or find your way around the campus with several map options, including a 3-D interactive version, at www.iupui.edu/maps/.

He is also providing consulting services to other offices and departments across campus. His latest project is with the Office of Student Life and Diversity in the creation and launching of a new Web site. In addition, Hodges will be producing news video segments for the Office of Media Relations. He shoots events at IUPUI and has already added a number of streaming video clips from outside sources to the multimedia section of the IUPUI news center. He created the IUPUI News 3-D introduction for all news clips.

Alumnus now a project leader at Genworth Financial

Before **Chris Hansen** graduated from the School of Informatics in 2004, he had to make some tough choices — among a number of competitive job offers, that is. Hansen combined his bachelor's degree in informatics with a focus on economics and found himself in demand at interviews.

In the end, he accepted a position as Information Management Leadership Program/IT project leader with Genworth Financial (formerly GE Financial Assurance) in Seattle. His duties include managing the technology, business conversion, and branding aspects of re-developing the GE Real Estate Investments Web site and leading user acceptance testing efforts.

Chris Hansen

He's covered a lot of ground in a year's time. Already, he has managed a team of contractors to design and develop an internal work management and project intake system using WebLogic, Oracle, and Six Sigma methodologies, and he led a team to gather requirements and coordinate senior IT leaders to create a centralized information portal using Vignette Content Management software. He also headed the development of a communication security standard, which enabled customer service associates to securely send GLB-regulated information over e-mail.

In his free time, Hansen enjoys playing guitar, exercising, and dining out. In the future, he hopes to attain an MBA in finance and go on to build a career in IT strategy and operations as it relates to financial systems.

Genworth (NYSE: GNW) is a leading insurance holding company, serving the lifestyle protection, retirement income, investment, and mortgage insurance needs of more than 15 million customers, and has operations in 22 countries, including the United States, Canada, Australia, the United Kingdom, and more than a dozen European countries. For more information about Genworth, visit www.genworth.com.

2005 graduate wins Hearst Fellowship

Demetrees Lee Hutchins, a 2005 graduate of the School of Informatics, Indianapolis, is the recipient of the prestigious Hearst Minority Fellowship. She will begin classes at the Center on Philanthropy at IUPUI working toward an MA in philanthropic studies in the fall. The center's staff believes that education in philanthropy is essential to leadership development. Hearst fellows devote time to studying philanthropic experience and tradition, investigating connections between formal education and community service, building connections with others in the center's programs, and discussing the role of philanthropy in all communities in society. Administered by the center, the Hearst Fellowship is funded by a grant from the William Randolph Hearst Foundation.

Alumni write in with news about their lives and careers

Zach Arbuckle, BA'02, computer science, is IT director for CarePlus Health Plan in New York City.

Neil K. Bahri, BS'03, informatics, is a business analyst for GAP Inc. in California and is working on high-cost-level projects ($5 million and above). He is in the real estate business capabilities division under the IT department.

Craig Birchler, BS'04, informatics, works for Kimball in Jasper, Ind., as an instructional designer and developer.

Guido "Joey" Borgnini Jr., BS'04, informatics, is working in network/IT support for Tippman Group/Interstate Warehousing in Indianapolis.

Ashlee Box, BS'05, informatics, currently works as a setup configuration analyst for Hewitt in Lincolnshire, Ill.

Sean Bradley, BS'05, informatics, serves as a security analyst at Deloitte & Touche in Indianapolis.

Thomas Brooks, BS'05, media arts and science, is a software engineer for Quest IS in Indianapolis.

Christopher M. Brown, MS'05, media arts and science, is a visual-media medical illustrator/animator for the IU School of Medicine in Indianapolis.

Vincent Cannon, BFA'88, MS'04, media arts and science, is working as a digital visual artist for University Information Technology Services at IUPUI.

Vasudha Chandrasekaran, MS'05, HCID/computer science, serves as a user experience engineer at Microsoft in Redmond, Wash.

Tim Craver, BS'04, informatics, is a software engineer at BitWise Solutions Inc. in Carmel, Ind.

Michael Daubs, BA'00, MS'05, media arts and science, is a network and computer specialist for the IU School of Medicine in the Department of Medical and Molecular Genetics.

Sharon Denbo, BS'05, health information administration, is employed in the Health Information Management Department at St. Francis Hospital in Beech Grove, Ind.

Jack Y. Duan, BS'97, computer science, is pursuing an MBA at the University of California, Berkeley. He lives in Sunnyvale, Calif.

Timothy Fleener, BS'05, informatics, currently works as a technical engineer at Epic Systems Corp. in Madison, Wis.

Jacob Garvin, BS'05, informatics, is a communication officer for the U.S. Air Force.

Katherine A. Gensits, BA'83, computer science, works part time as a programmer for Vitra Inc. in Allentown, Pa. She moved to New Tripoli, Pa., with her husband and three children after a 16-year career as a principal with American Management Systems in Denver.

Bradley Gessler, BS'04, informatics, is a systems analyst for Deloitte Consulting in Chicago.

Kevin Gormal, BS'05, media arts and science, is a graphic designer for the *Indianapolis Business Journal*.

Dennis P. Groth, PhD'02, computer science, received an IU SBC Fellowship in summer 2005 for his project "Transitioning Capstone Projects to Oncourse CL and e-Portfolio." He was awarded a $2,500 grant to pursue applications in the category of Preparing for Innovation. He is a faculty member in the School of Informatics at IU Bloomington.

Jon Grover, MS'04, media arts and science, is a programmer/analyst for Van Ausdall & Farrar in Indianapolis.

Jason Guy, BS'04, media arts and science, is a map texture artist for Pop Top Games and Railroad Tycoon in Fenton, Mo. He uses a 3-D engine and editor to edit terrain, place objects such as houses and trees, and paint textures such as fields and roads on the ground.

Barbara Howrey, Cert'89, BS'05, informatics/media arts and science, completed an internship as a usability analyst at Pearson Education in Indianapolis. Howrey is involved with usability testing, prototype development, information architecture, and Web design in the InformIT Division.

Christopher MacNaughton, BS'05, media arts and science, is the director of the Performing Arts Facility at Franklin Central High School in Indianapolis.

Mark Erit Marchani, BS'03, informatics, currently

IUAA approves Informatics Alumni Association

The IU Alumni Association Executive Council recently approved the School of Informatics Alumni Association as an official IUAA constituency board. The School of Informatics Alumni Association Board of Directors met for its inaugural meeting in April, and the association hosted its first alumni event two months later on the terrace of the Informatics Communications and Technology Complex on the IUPUI campus. Highlights of the event included a tour of the new informatics building, hosted by Executive Associate Dean Darrell Bailey, and a musical performance by new media Professor Ricardo Laranja.

School of Informatics Alumni Association Board

- President: Neal Moore, director of community relations, IUPUI School of Informatics
- Vice president: Matt Hottell, lecturer, IUB School of Informatics
- Treasurer/secretary: Robert Kery, developer, Performance Assessment Networks
- Josh Esslinger, eTapestry.com
- Ricardo Laranja, adjunct professor, IUPUI School of Informatics
- Felisa Tennant, clinical assistant professor, HIA, IUPUI School of Informatics
- Dennis Heller, director of health information management, Bloomington Hospital
- Mike Sebeckis, business analyst, Baker Hill
- Jason Zickler, vice president of design and new media, Pathway Productions

works as a computer technician for the Information Technology Support Department at the University of Utah Hospital.

Jon Marshall, BAJ'91, MS'04, media arts and science, is a project manager for D.J. Case & Associates in Mishawaka, Ind.

Benjamin Messer, BS'04, media arts and science, is working as a graphic designer creating interactive multimedia and DVDs at World Media Group in Indianapolis.

Mark Michuda, BS'05, informatics, currently serves as a network security consultant at Motorola in Chicago.

Brian Miller, MS'04, media arts and science, moved to Sacramento, Calif., where he works as a freelance artist in design and development.

David Milsho, BS'05, media arts and science, is working for the Pervasive Technology Labs at IUPUI.

Ben Murphy, BS'02, MS'05, human-computer interaction design, recently secured a position at Abelson-Taylor in Chicago as an interaction designer.

Jeff Murray, BS'97, computer science, completed an MS in computer science with a focus in database systems and artificial intelligence at DePaul University in March. He is a software architect for Nuveen Investments in Chicago.

Chiaki Nagaya, BS'05, informatics, is now living in Tokyo, where he works as a software developer at NTT Docomo Technology.

Vijay Narayanasamy, MS'03, bioinformatics, has recently taken a job as an application engineer for Bioimagene in San Mateo, Calif. He will be working in Image Informatics.

Luke Newton, BS'03, media arts and science, works for ExactTarget Inc. as an Internet marketing manager. He directs the development and design of the corporate Web site and landing pages; he also analyzes the effectiveness of online campaigns.

Himanshu Patel, BS'03, media arts and science, MS'05, media arts and science, is working as a contractor for Legal Animatics in Indianapolis.

Shawn Plew, BS'04, media arts and science, is the multimedia coordinator for Campus and Community Life at IUPUI.

Christopher Pyle, BS'05, media arts and science, is working as a flash developer for Oxygen Education LLC in Indianapolis.

Angela Quick, MS'05, media arts and science, is a senior communications specialist for University Information Technology Services and adjunct instructor for the School of Informatics' New Media Program and the School of Journalism at IUPUI.

Christopher Rozzi, MS'05, media arts and science, works for the Children's Museum of Indianapolis as a graphics manager.

Kurtis Rush, BS'04, media arts and science, is a project manager and head graphic designer for Legal Animatics Inc. in Indianapolis.

Gary Schmitt, MS'05, media arts and science, is a graphic designer, illustrator, and project manager for the IU School of Medicine in Indianapolis.

Stephany Shankel, BS'04, media arts and science, is working as a paid intern at True Blue Technologies, a Web marketing company in Carmel, Ind.

Jeramy Spurgeon, BS'05, media arts and science, is a multimedia specialist in the Department of Pharmacology and Toxicology at IUPUI.

Colin Stevenson, BS'05, informatics, currently works at Conexion in Antigua, Guatemala, as a Web developer.

Darrin Strain, MS'05, media arts and science, is currently working as a marketing manager for Arrow Electronics in Indianapolis.

Dan Sullivan, BS'03, informatics, is a systems analyst for Central Parking in Nashville, Tenn. Sullivan is an ASP.NET developer and is responsible for a number of Web sites, including www.parking.com.

Christopher Todnem, BS'05, informatics, is working for Repro Graphics in Indianapolis as an IT manager.

Kim Trang Vo, MS'04, media arts and science, is a systems analyst for the Indianapolis Public Schools system.

Harlon Wilson, BS'04, media arts and science, MS'05, media arts and science, is president and CEO of Legal Animatics in Indianapolis.

Kyle Wolf, BS'05, informatics, is working as a PC/network technician at Appnuity in Indianapolis.

School of Informatics alumnus finds career success at Baker Hill

Michael Sebeckis

Michael Sebeckis has been building a career in informatics at Baker Hill Corp. in Carmel, Ind., since graduation in 2004. Sebeckis combined his bachelor of science in informatics with a cognate in telecommunications and a minor in German.

Sebeckis began his career at Baker Hill in June 2004 in a program called Professional Careers Foundation, which integrates recent college graduates into the business. Now, as a quality-assurance engineer, Sebeckis is responsible for testing new program functionality and solving product-related issues for clients. "One of the most valuable things I took away from the School of Informatics," says Sebeckis, "is the ability to learn how to learn."

Sebeckis is one of six inaugural members of the Informatics Alumni Association board. He enjoys watching IU basketball and playing video games and poker. He plans to eventually pursue a graduate degree in a technology- or business-related field.

Founded in 1983, Baker Hill designs, develops, and delivers business-process solutions that help banks profit from client relationships that span all lines of business. For more information, visit www.bakerhill.com.

Vision

Informatics studies the application of information technology to the arts, sciences, and professions, and its use in organizations and in society at large. The Indiana University School of Informatics has set as its goal to be nationally recognized as the foremost in the country for excellence and leadership in informatics programs, including undergraduate and graduate education, research, placement, and outreach.

Mission

We believe there is great need and opportunity for professionals trained in state-of-the-art information technology and science with an emphasis on creative human applications. There is an urgent need in our society for graduates with education and experience in informatics, particularly with interdisciplinary skills. The School of Informatics will be foremost in the country to graduate professionals with formal preparation in information technology with subject area expertise. To this end, we will:

- Lead the nation in the development of an innovative and successful new curriculum for information technology and its applications;
- Educate students, including those who might not traditionally consider an educational path in technology, especially women and minorities;
- Encourage interdisciplinary research projects in the field of Informatics, focusing on distributed systems technology, information theory and information management, human factors and Human-Computer Interaction, and study of the social impacts of information technology;
- Serve the state of Indiana by way of education, community participation, and collaborative research partnerships, thereby participating in the growth of an IT culture in the state and encouraging continued economic development;
- Produce graduates who become leaders in the growing information economy of Indiana and the world; and
- Develop synergistic relationships with industry to develop and advance research in information technology and its applications.

What's new with you?

The IU Alumni Association is charged with maintaining records for all IU alumni. Please print as much of the following information as you wish. Its purpose, in addition to providing us with your class note, is to keep IU's alumni records accurate and up to date. To verify and update your information online, visit our online alumni directory at www.alumni.indiana.edu/directory.

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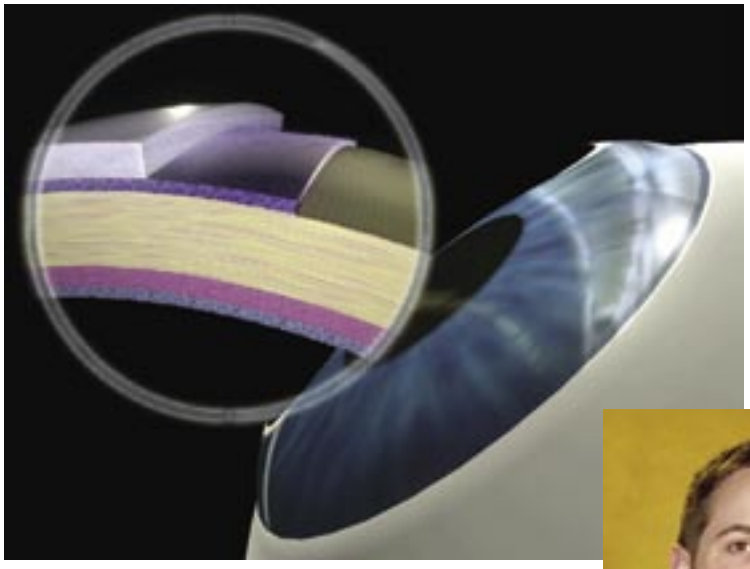
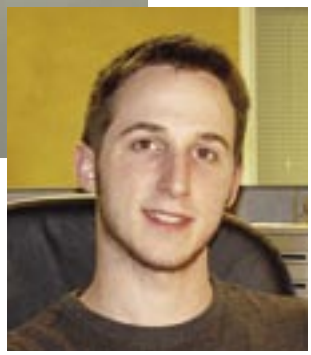
Please mail to IUAA, DeVault Alumni Center, 1000 E. 17th St., Bloomington, IN 47408, or fax to (812) 855-8266.

VisionFest 2005

Stephany Shankel's passion for 3-D began in fall 2003 while taking Introduction to Computer Simulation/Animation at IUPUI. She enjoys 3-D modeling, texturing, and lighting the most, especially the process of researching and analyzing whatever is to be modeled and examining it from all angles. Her goal for the hibiscus project was to simulate realism. She chose the hibiscus because "it's a challenge to model something organic." Shankel visited Garfield Conservatory and Sunken Gardens in Indianapolis to study different plants and photograph them from different angels to inform her modeling and texturing; she saved the photos in her texture library. Shankel, an undergraduate in the New Media Program, won in the Undergraduate Level category.

Justin Heidenreich's VisionFest 2005 entry, "LASIK Surgery," is a 3-D visualization that demonstrates the LASIK process as well as the common causes of improper vision. Inspiration for this piece came from his mother, who had been considering this kind of surgery. Heidenreich's goal with this assignment was to create an informative and scientifically based demonstration that used advanced texturing techniques to maximize visual appeal. A graduate student in the New Media Program, Heidenreich won in the Graduate Level category.





James Tomasino came to IUPUI in the fall of 2002 from Rowan University in New Jersey, where he studied computer science. He found his niche in new media when he joined the program in 2004 as an undergraduate. When not studying, producing, or in another way living every moment at IUPUI, Tomasino enjoys gaming of all varieties (board, table-top, and video), as well as writing, drawing, and reading. Tomasino's depiction of Notre Dame won the Audience Choice award at VisionFest 2005.

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