

# INDIANA **informatics**

FALL 2010  
Vol. 8, No. 1



Now & Then  
**Informatics**  
after **10**



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## INDIANA informatics

Fall 2010 • vol. 8 no. 1

*Indiana Informatics* is paid for in part by dues-paying members of the Indiana University Alumni Association. The semi-annual publication is produced twice annually through the cooperative efforts of the IUAA and the IU School of Informatics to provide useful information and news to alumni and friends of the school.

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## A milestone worth celebrating!

**T**he Indiana University School of Informatics is 10 years old! Parts of it also are 60, nearly 40, and 5. We're proud to reach these milestones in excellent health, and to take a little time to reflect upon them.

The school was formed in 2000 primarily due to the vision of the 3 Ms: then Indiana University President Myles Brand, founding dean Mike Dunn, and current IU President Michael McRobbie, who was vice president at the time. It was founded on the premise that computing and information technology are crucial to Indiana, the nation, and the world, and that the most visionary way to approach this field was through a broad collaboration of foundations, applications, and human and societal issues.

Since then, the dot-com bubble has burst, and we have experienced the biggest recession in decades. And guess what: the vision is as valid as ever!

A week doesn't go by without a new analysis or report showing that computing and IT careers are among those in highest demand and most crucial to economic and societal progress. And the breadth and scope of the school has proven to be precisely what is needed in an era where technical skills alone often are purchased from the most inexpensive global labor market.

The school has grown and matured remarkably well as it nears its pre-teen years. Our enrollment is nearing 2,000 students; the Bloomington portion alone enrolled 230 new undergraduate majors last year, nearly double three years ago, while also enrolling a record number of graduate students. And even in the recent economy, employers clamor to hire our students and make it clear they could use many more. At the same time, our faculty shattered its research funding record last year in fields — such as computer security and many health related topics — that are vital to our citizens and nation.

We take special pride in the recent 60th birthday of our IUPUI health information administration program. This program, which began as a medical records administration degree, has a wonderful legacy of producing successful and impactful

graduates. As health IT becomes a critical national focus its inclusion in our school is more valuable than ever.

And the Bloomington computer science program, which joined the school five years ago, will be 40 in 2011. The inclusion of computer science in our school was crucial to achieving our vision of breadth; it also has enabled IU Bloomington computer science, with its proud history as a highly ranked department, to significantly increase and broaden its faculty and areas of emphasis and look forward to an even brighter future.

What is most remarkable, though, is to reflect on how computing and information technology have continued to revolutionize our world and culture in the last decade. Facebook (2004), Twitter (2006), the iPhone (2007), and the iPad (2010) are examples of two phenomena — social networking and powerful, highly mobile computing devices — which have become fundamental to the world in everything from our social lives to responding



DEAN ROBERT B. SCHNABEL

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"OUR ENROLLMENT IS NEARING 2,000 STUDENTS ... AT THE SAME TIME, OUR FACULTY SHATTERED ITS RESEARCH FUNDING RECORD LAST YEAR."

---

more effectively than ever to natural disasters. In the same period, Central Indiana has become one of the fastest growing regions for IT entrepreneurship.

When we project into the next decade, two things are certain: no one can fully predict how computing and IT will continue to revolutionize our world, and our school is wonderfully positioned to be part of that ongoing excitement.

*Bobby*

# [HAPPENINGnow]

Notes and news about Informatics today

## A summer of opportunities

STEM internships and summer camp kept the halls buzzing over the summer months.

The School hosted 17 STEM (science, technology, engineering, and math) minority research interns this summer – all from historically black colleges and universities (HBCUs) – as part of the Summer Research Institute. While in Bloomington, the students worked with faculty members Judy Qiu, Minaxi Gupta, and Kay Connelly on a variety of research projects.

Summer in Bloomington also meant the sixth annual Informatics Summer Camp – a weeklong informatics and technology experience for high school students. Over 50 students from all over Indiana and the Midwest came to campus in June for a fun-filled week of learning and college life!



At top: Now in its sixth year, the Informatics Summer Camp brings technology experiences and exposure to college to high-schoolers. At left, campers enjoy many activities in Bloomington, from puzzles to bowling.

Bottom: This year, the school hosted minority research interns to assist with projects in science, technology, engineering, and math (STEM).

Courtesy Indiana University

## Students take IU IDEA Competition title

The first annual IU IDEA (Innovations Developed for Entrepreneurial Action) Competition was held in April at the new IU Innovation Center. The event was sponsored by the Kelley School of Business's Johnson Center for Entrepreneurship & Innovation as part of its cross-campus initiative to promote innovative thinking.

The IDEA Competition offered students in all disciplines across the Bloomington campus the opportunity to present their innovative ideas in the form of a feasibility plan before a panel of judges. Contestants had the opportunity to win up to \$5,000 and office space in the Johnson Center's new "Hoosier Hatchery" in the IU Innovation Center.

Forty-one teams from across campus applied and were required to submit feasibility plans. Following a review of the plans, 16 teams were invited to compete. Competing teams were from Informatics and Computing, Kelley School of Business, Jacobs School of Music, Maurer School of Law, School of Education, and the LAMP program.

Informatics and Computing's Nick Baker and Cameron Schnick, were part of the first place team, LiveArrive LLC, winning an award of \$4,000! Congratulations to both of them!

## Lugo-Martinez receives Ford Foundation Fellowship



Lugo-Martinez

Jose Lugo-Martinez, a first-year PhD student in the informatics program in Bloomington, was awarded a Ford Foundation Predoctoral Diversity Fellowship, worth approximately \$66,000 over three years.

Lugo-Martinez will continue his studies and research, focusing on bioinformatics. Within bioinformatics he is focusing on developing algorithms to understand protein function and how the disruption of protein function leads to disease.

In 2010, the Ford Fellowship program awarded approximately 40 pre-doctoral fellowships, which provide three years of support for individuals engaged in graduate study leading to a PhD or Doctor of Science (ScD) degree.

## Alumni claim 'Best Musical Score' in film festival

Multiple students and alumni of the IU School of Informatics at IUPUI participated in the 48 Hour Film Project, an international traveling film festival that visited Indianapolis this summer. The goal? To produce the best short film possible in 48 hours.

Pants Cannon Media, a team consisting of Ricardo Laranja, a lecturer in the media arts and science program, and media arts and science alumni Kylee Wall, Joshua Fike,



## Security informatics researcher named iGov Research Institute fellow

This summer, Vaibhav Garg — a first-year PhD student in Bloomington's security informatics program — spent a week at the Hague in the Netherlands. He was awarded a fellowship in the 2010 global competition of the Center for Technology in Government.

The iGov Research Institute is an intensive weeklong residential program that provides doctoral students from all over the world the opportunity to participate in field activities with experts and leading scholars to assess how information and communication technologies are impacting the public sector.

Garg, whose research focus is on using behavioral economics to facilitate risk communication for security and privacy on the Internet, will have the opportunity to interact directly with public sector leaders, to present his own developing research ideas, and to work with other students on a group project.

Katie Toomey, Aaron Whiteford and Jeremiah Nickerson, was awarded Best Musical Score in the 48 Hour Film Project competition for their fantasy-genre short film, "Cooper O'Brien and the Magical Moustache."

### [OF NOTE]

#### Inspiring a new generation

Dean's Advisory Council member Albert Chen and his daughter, Stephanie Fuhrmann, made the cover of Indianapolis Woman magazine's June 2010 issue. The cover feature "Like Father, Like Daughter" shares the stories of three women and how their dads inspire them.



To read, visit <http://www.indianapoliswoman.com>, and click on "past issues."

# Connected!

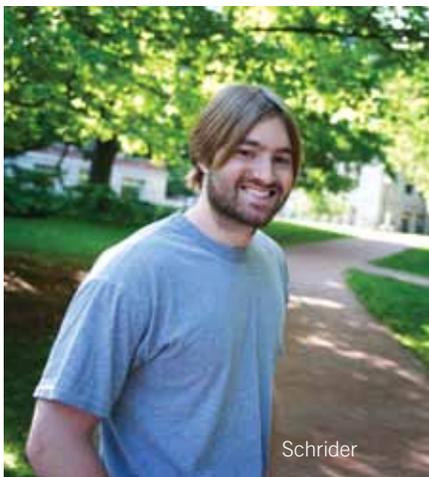
The campus landscape for Bloomington continues to change. This fall, the new building connector was officially completed and opened. In late September, the school opened the doors to 12,000 square feet of new office and research space.

The connector joins the two Informatics buildings on 10th Street. It houses faculty offices, innovative student spaces, and a 60-seat state-of-the-art classroom.



Ann Shertz

## Bioinformatics student receives NIH-funded grant



Schrider

Dan Schrider, a third-year PhD student in Bloomington, received a Genetics, Cellular, and Molecular Sciences (GCMS) training grant for this school year.

The NIH-funded GCMS Training Grant program has a long history of mentoring outstanding graduate students dating back to its founding in the 1950's by the renowned geneticists H.J. Muller, Salvador Luria, Tracy Sonneborn, Ralph Cleland and Marcus Rhoades. Graduate trainees are immersed in a multidisciplinary environment with a tradition of excellence that promotes problem-directed approaches to biology.

The GCMS training grant program includes 50 faculty mentors and supports 16 graduate trainees in biology, biochemistry, chemistry, and medical sciences each year.

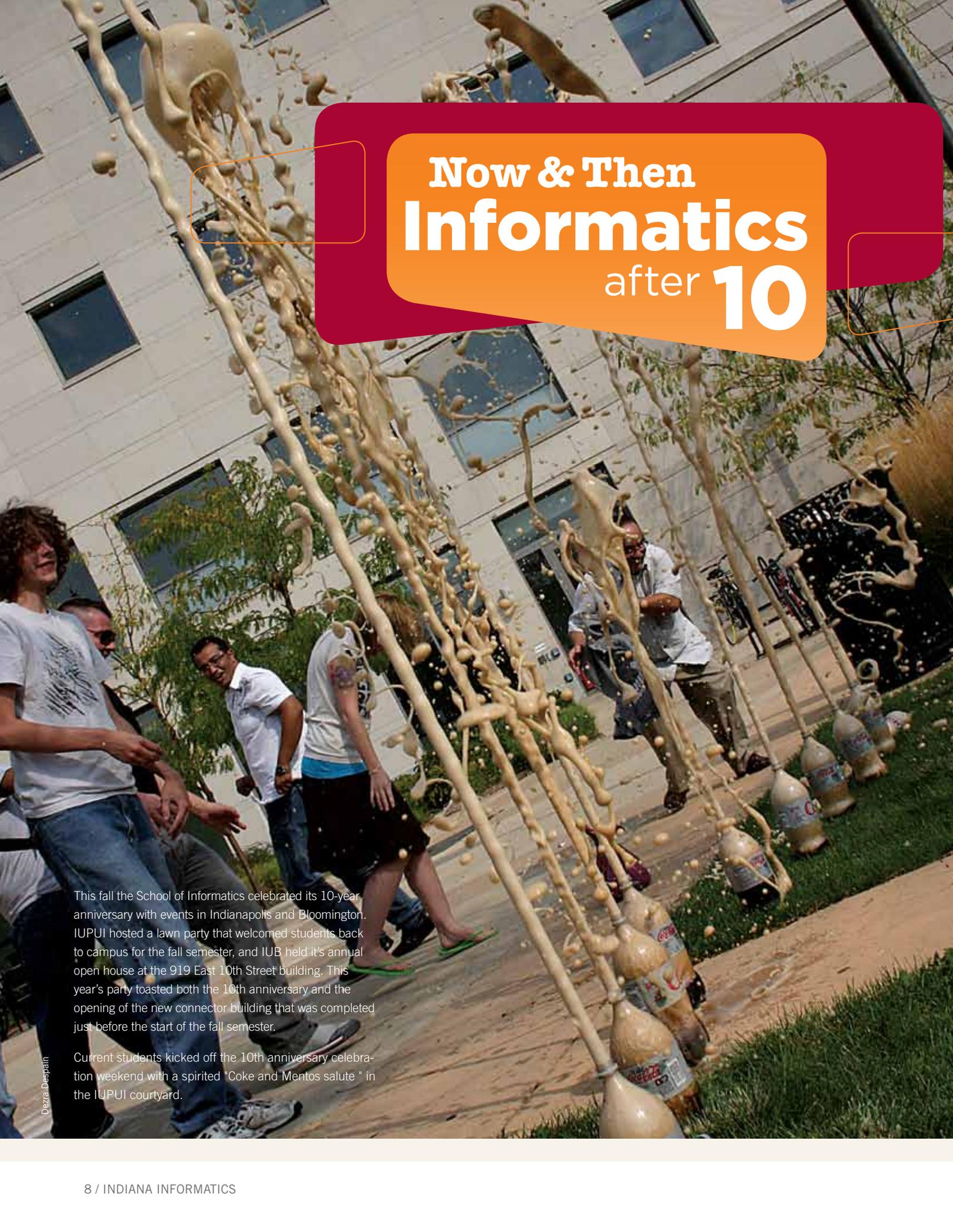
## IUPUI's Gen Con Extravaganza includes hit author as keynote

Students and faculty turned the School of Informatics into the land of "geekdom" in July with the return of the IUPUI Gen Con Extravaganza.

This year, the conference featured best-selling fantasy author Tracy Hickman, who is the author or co-author of more than 40 fantasy novels. Hickman, accompanied by his wife Laura, led one of his hugely popular "Killer Dinner" performances, and then followed his performance with a discussion of his new project, *Dragon's Bard*.



Ann Shertz



# Now & Then Informatics after 10

This fall the School of Informatics celebrated its 10-year anniversary with events in Indianapolis and Bloomington. IUPUI hosted a lawn party that welcomed students back to campus for the fall semester, and IUB held its annual open house at the 919 East 10th Street building. This year's party toasted both the 10th anniversary and the opening of the new connector building that was completed just before the start of the fall semester.

Current students kicked off the 10th anniversary celebration weekend with a spirited "Coke and Mentos salute" in the IUPUI courtyard.

Dezra Despain

by Lisa Herrmann

## Close your eyes and think back 10 years.

What were you doing? It's probably hard to imagine your life without some of the technologies we use everyday. In 2000, we had just "survived" Y2K. At midnight on December 31, 1999, life went on without pause.

And, so, we forged ahead into a new century. Sydney, Australia, was in the world's spotlight as host of the summer Olympics, Hillary Clinton was elected to the U.S. Senate, the first crew took up residence in the International Space Station, the U.S.S. Cole limped home after being severely damaged by Al Qaeda suicide bombers while in port in Yemen, and, at the end of the year, the country became mired in the Florida election controversy that made the "hanging chad" a household term.

Technologically, we were on the brink. 2000 was the year that digital music emerged – Napster changed how the world bought and shared music. The iPod revolution was just around the corner, but we weren't walking around with white ear-phones just yet. Sony launched its Playstation 2 in Tokyo in 2000. We were still watching movies on our VCRs — the DVD player had just come out, and we could only dream of "on demand" television.

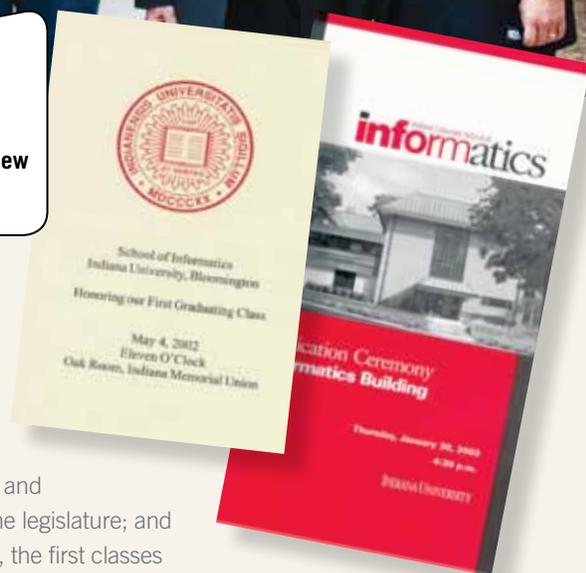
Indiana University stood poised on the brink as well. The formation of the first new school in 32 years was just around the corner. Mike Dunn, who would become the School of Informatics' founding dean, was chairing the University's Information Technology Committee. This committee was one of three working to create a strategic plan for the future. Then-president Myles Brand and then-vice president of information technology, Michael McRobbie, were laying the groundwork for IU to become a leader in the creation and use of information technology — both as part of the infrastructure and with an academic presence. That academic presence took shape as the School of Informatics.



Dean Bobby Schnabel, alumnus Scott Jones, founding dean Mike Dunn, and Dean's Advisory Council Chairman Don Aquilano at the 10-year celebration.

► **When it was founded in 2000, the School of Informatics was IU's first new school in 32 years.**

In late 1999, the notion of forming the school was officially approved by the IU Board of Trustees and passed through the legislature; and in the fall of 2000, the first classes in informatics were offered on the IUB and





➤ Over the years, students and faculty claimed several campus homes, including a new building at IUPUI and the overhaul of the 10th St. building at IUB.

IUPUI campuses. Courses included “Technology and Business: Making the Marriage Work” taught by entrepreneur Scott Jones, computer science alumnus and inventor of voicemail (who, coming full circle, recently spoke on his life as a prolific IT entrepreneur at the School’s 10th Anniversary celebration).

The year 2000 brought serious budget issues to the state of Indiana. The future of higher education in the state hung in the balance — all the while, informatics classes continued to fill on both campuses and IUPUI was planning the ground breaking for the new Informatics and Communications Technology Complex (ICTC) building. That came in the fall of 2001, after a budget deal was cut.

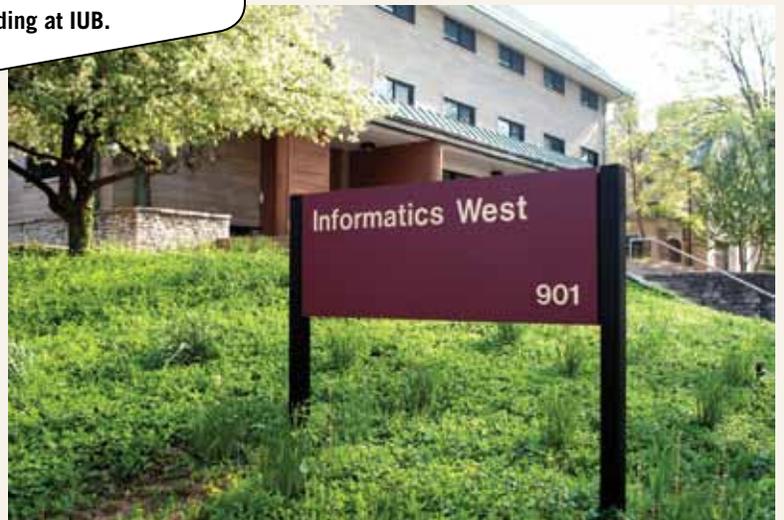
2002 marked two significant milestones. The school hired its first full professor and conferred its first degrees, both during the first half of the year!

In April 2002, Bill Aspray, a renowned researcher and teacher who had spent the past seven years as the executive director of the Computing Research Association, joined the school as its first full professor. Until this point, the faculty members teaching informatics classes had also been faculty members in some other school on campus, so this was an important coming of age.

Just one month later, 22 students received degrees during May commencement ceremonies as the first School of Informatics graduates. The fledgling school now had an alumni base. And that base would continue to grow. At that time IUB had 152 declared majors; IUPUI had 519. Those numbers have grown every year since!

As Informatics continued to grow, hiring five more full-time faculty members for the fall 2002 semester, so did its space needs, and in January 2003, a former sorority house on the corner of 10th Street and Woodlawn Ave. became Informatics’ new home in Bloomington. Meanwhile, in Indianapolis, the ICTC building was progressing slowly. Budget constraints slowed construction, all while the student population continued to grow.

As IU dealt with the ongoing threat of budget cuts and the search for a new president (Myles Brand stepped down at the end



of 2002 to take a position as the head of the NCAA), the three-year old School of Informatics chugged along, gaining students each semester. Students were discovering that the unique mix of technology and other disciplines made them in-demand in the job market, often leading them to well-paying, sought-after jobs.

At the close of 2003, discussions were had on the Bloomington campus about merging the School of Informatics, the computer science department (which had a long history as part of the College of Arts and Sciences), and the School of Library and Information Science.

The idea that consolidating areas with obvious curricular and research synergies was appealing – and talks continued for the next year. Ultimately, SLIS decided against being a part of the merger, but the Computer Science Department and the School of Informatics joined forces in 2005, creating a School that boasted over 70 faculty and almost 1,000 students.

While Bloomington discussed merger plans, IUPUI neared completion of the long-awaited ICTC. The \$43.6 million facility was dedicated in October 2004, providing desperately needed teaching and research space to the School of Informatics (along with Music,

Pervasive Technology, and UITs).

The School began its fifth year in a good position. The student population continued to grow, IUPUI was housed in a showpiece building, IUB continued to hire faculty, and, in March, it was announced that the school would offer a PhD in Informatics—the first such degree in the nation. A PhD program would help the school meet its promise to contribute to the state's economy.

Later that same month, the merger with the IUB Computer Science Department proceeded, significantly changing the research and course offerings. At this point, the school had 1,500 students and 600 graduates. The fledgling Informatics PhD program began the fall 2005 semester with 10 students and faculty members were receiving grants and making news for their research. In general, life was good in Informatics.

The biggest milestone in the school's second five years came in the form of a change in leadership. Upon Dunn's retirement, Bobby Schnabel took the reins. An acclaimed computer scientist and researcher, Schnabel left a position as vice provost/associate vice chancellor for academic and campus technology and professor of computer science at the University of Colorado-Boulder to move to Bloomington and lead the school.

Dean Schnabel undertook a major strategic planning process that engaged faculty and staff to consider the full range of activity, including research, undergraduate and graduate education, faculty affairs, and diversity. Members of the Dean's Advisory Council were enlisted to consider the school's role in economic development. The strategic planning process provided an opportunity to consider where the school had been and to chart a clear path moving forward.

Among the notable outcomes of the strategic plan was a focus on diversity, with a goal of becoming a national exemplar. To spearhead these efforts, Maureen Biggers, a national leader in diversity efforts, came on as assistant dean for diversity and education. To date, the school has seen a steady increase in enrollment percentages of women and underrepresented minorities.



➤ **The 10th anniversary celebration included an address by alumnus Scott Jones, founder of ChaCha, several receptions, and a fun "salute" from current students.**



With continued growth, the need for additional space was unrelenting. In 2008, Bloomington renovated a former fraternity house next to the existing informatics building. In the fall of 2010, a 12,000 square foot building connecting the two buildings at 10th and Woodlawn was completed. The new “connector” features a state-of-the-art classroom and forward-thinking spaces for collaboration among students, faculty, and researchers.

The first 10 years have seen the school grow from a single dean with a grand vision, to more than 100 faculty and nearly 2,000 students on two campuses; from temporary offices to gleaming new spaces. The IU School of Informatics has produced thousands of graduates who contribute to the economic vitality of Indiana and beyond, and seminal research that impacts diverse fields.

Here's to the next 10 years!

## Hearing the online experience

NSF grant supports work that could benefit visually impaired users



Bolchini

Davide Bolchini, assistant professor of human-computer interaction at IUPUI, was recently awarded a grant by the National Science Foundation (NSF) to identify and evaluate strategies that may help blind and visually-impaired users better navigate the web using their auditory senses.

The project could also have implications for mobile device users when it may be inconvenient, distracting, or even dangerous to look at a device's screen while engaged in another activity. The project will receive \$424,000 over three years from NSF's highly competitive Human-Centered Computing program.

## Alumnus to lead IUPUI Health Informatics Program

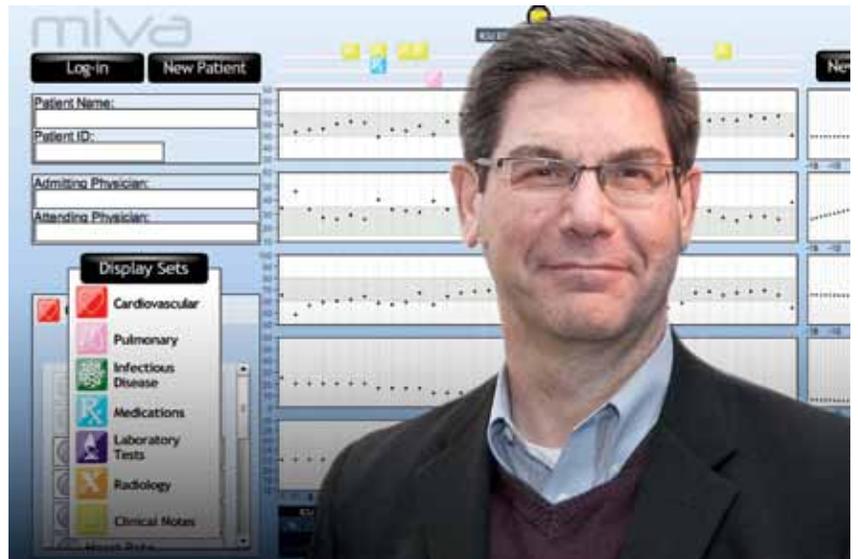
In August, John. T. Finnell, MD, was named director and associate professor of the health informatics program at IUPUI. Finnell will play an integral role in shaping the future of the graduate and doctoral program.



Finnell

Finnell is principal investigator on a recent \$1.4 million grant to offer workforce development programs training individuals for important new careers in health information technology. These graduate-level programs are available as part of the School of Informatics' health informatics program, in collaboration with the Regenstrief Institute and the IU schools of Medicine and Nursing.

In addition to his role with the School of Informatics, Finnell is associate professor of emergency medicine at the IU School of Medicine and a research scientist at the Regenstrief Institute.



## New MIVA technology enhancing Intensive Care Units

Intensive Care Units (ICUs) are home to many healthcare facilities' most critical and vulnerable patients. They are also home to multiple forms of technology and equipment, each offering staggering amounts of patient data.

Recognizing that quality care is dependent upon the ability to monitor, interpret and respond to patient data quickly and accurately, a team of researchers led by Anthony Faiola, executive associate dean and director of the Human Computer Interaction Program at IUPUI, is changing how doctors and nurses interface with health information in ICUs.

They have created the Medical Information Visualization Assistant (MIVA), a new technology that consolidates large amounts of essential patient information into one visual and interactive format. It aids physicians and nurses by allowing them to streamline work processes and ensure accuracy of information. Devices monitoring patients' vitals, such as blood pressure, heart rate and other measures, are integrated with MIVA and displayed on a large touch-screen within the ICU. MIVA can also track changes over time. This means physicians can interpret the longitudinal effects of an intervention on patients' health, such as a newly administered drug.

In a 2006 usability study at the Indiana University School of Medicine and Riley Hospital for Children, physicians using MIVA were found to be faster and more accurate than those in a control group. In this same study, a majority of physicians that interacted with MIVA agreed that the device has the potential to improve critical care decision-making.

### Inspiring a new generation

Medical Information Visualization Assistant (MIVA) consolidates essential patient information into one interactive format. Devices monitoring patients' vitals, such as blood pressure and heart rate, are integrated with MIVA and displayed on a large touch-screen within the ICU.

# What can World of Warcraft and Etsy teach us?

## Two professors explore online communities

Using two of the largest creative online communities — World of Warcraft gamers and Etsy artists — as their laboratory, professors Jeff and Shaowen Bardzell hope to understand how the inner workings of large networked collaborations could benefit scientists, corporations and the very IT designers who facilitated the success of the two online communities.

The Bardzells have received a \$686,000 grant from the National Science Foundation's Division of Information and Intelligent Systems to investigate and construct a history of the two large-scale collaborations and then try and model how the two online communities successfully created and distributed productivity on a scale involving millions of users.



J. Bardzell



S. Bardzell

With respect to WoW, a massive online player game with more than 11 million users, the researchers will study a sampling of a creative product called machinima, user-created videos that number upwards of a half-million on sites like YouTube, Warcraftmovies.com, and machinima.com. Even though any given machinima video may have been made by a small number of people, the researchers will use critical and systematic analysis of major WoW videos to tease out the history of machinima and place that next to their inquiry into the nature of massively amateur creativity.

“When we talk about population-level creativity, we don't mean in a single video per se, but rather in the visual language out of which the video is made,” Jeffrey Bardzell said.

“By analogy, a thriller in theatres today may have influences of

Hitchcock and Polanski in it, because these two directors have helped construct today's cinematic language of the thriller. But we obviously don't say that the film was directed by Hitchcock and Polanski.”

One WoW machinima on YouTube of a funeral created for an actual WoW gamer who passed away has received 4.5 million views, and another called “Craft of War: BLIND” has had 4 million views and received more than 17,000 viewer comments on various WoW-related sites.

The second massive creative network to be studied, Etsy, is dominated by women and has hundreds of thousands of individual vendors spread over 150 countries. Each month it accounts for almost one million product sales valued at around \$15 million.

“Etsy's modes of production, folk theories of creativity and what is ‘quality,’ and social understandings may be gendered in a way that differs from that of the male-dominated WoW machinima community,” Shaowen Bardzell noted. “The goal here is to not only understand network-based participatory creativity, but specifically to consider it from the perspective of a female mode of creative knowledge production.”

Hoping to bring clarity to the relationships between the creative practices of small professional teams and those of massive collaborations like WoW and Etsy, the Bardzells, who are married, see new opportunities arising for the design of creativity-support software and for an extension of successful, emergent network-based creative practices into the areas of professional innovations and scientific collaboration.

“Our community, the human-computer interaction community, needs to develop an understanding of these new appropriations of creative software,” Jeffrey Bardzell said. “And the science education community also has a stake in this work as most of these networks have home-grown and successful models of teaching and learning as one of their core social activities. In other words, these communities not only innovate in aesthetics, but also in pedagogy.”

# Pfizer supports Chemogenomics

## Research could uncover new uses for drugs

Pfizer has awarded a \$140,000 grant to Indiana University, which will be used to fund Professor David Wild of the School of Informatics and Computing to research ways to data mine the ever-increasing amount of publicly available information about chemical compounds and their biological activities.

Professor Wild's lab develops large-scale Semantic Web-based data mining and network methods that can potentially find previously unknown links between chemical compounds, drugs, biological pathways, targets, genes and diseases. This field, known as “chemogenomics” — and, in a wider sense, “systems chemical biology” — is rapidly emerging as a way of helping discover new therapies for disease, and helping find new uses for existing drugs.

“This research is significant because it will for the first time provide a large-scale public chemogenomics resource with integrated data mining tools,” said Professor Wild. “Biomedical researchers will be able to use this to seek to find new important biological relationships and to help discover new drugs.”



Wild



### [OF NOTE]

## Stolterman named *Interactions* editor

IU Bloomington HCI professor Erik Stolterman was named editor of the Association for Computing Machinery's *Interactions* Magazine. *Interactions* is a bimonthly publication that features articles, stories, and content related to the interactions between experiences, people, and technology.

## Dunn elected to AAAS

Former Dean Mike Dunn has been elected to membership as fellows in the American Academy of Arts and Sciences. Founded in 1780, the American Academy of Arts and Sciences is an independent policy research center that conducts multidisciplinary studies of complex and emerging problems. Elected members are leaders in the academic disciplines, the arts, business, and public affairs.

## Paper to appear in top physics journal



Menczer



Ratkiewicz



Flammini



Vespignani

A paper coauthored by Bloomington PhD student Jacob Ratkiewicz, Santo Fortunato of ISI Foundation in Torino, Italy, and professors Alessandro Flammini, Alex Vespignani, and Fil Menczer has been accepted by *Physical Review Letters*, the top journal in Physics.

The paper, “Modeling Online Popularity,” provides massive quantitative, global, and longitudinal analysis of the processes driving the acquisition of popularity in the online world.

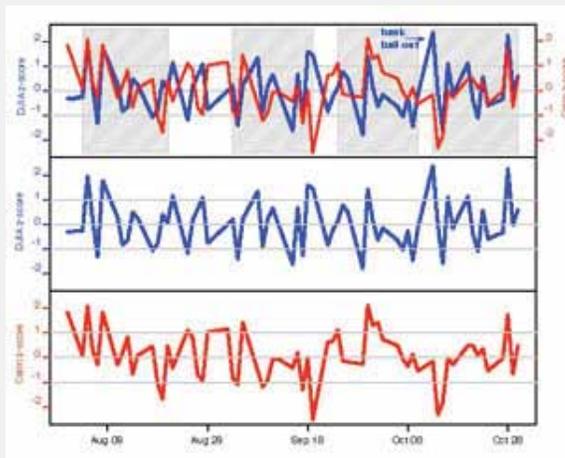
To this end, the study analyzes large-scale datasets that are representative of the Web by capturing the online behaviors of millions of people and sheds light for the first time onto the manner in which collective attention manifests itself through bursts, which are both violent in magnitude and unpredictable — much like online earthquakes. Contributing with Vespignani on the paper were research scientists Duygu Balcan and Bruno Goncalves of the IU School of Informatics and Computing and the Pervasive Technology Institute; IU Physics Department graduate student Hao Hu; and scientists Vittoria Colizza and Jose Ramasco of the Institute for Scientific Interchange Foundation in Torino, Italy.

## Bollen earns Mellon grant



Bollen

A \$349,000 grant from the Andrew W. Mellon Foundation to Indiana University Bloomington will fund research to develop a sustainable initiative to create metrics for assessing scholarly impact from large-scale usage data. Associate professor Johan Bollen and the National Information Standards



## Analysis of 10 million tweets finds public mood can predict Dow days in advance

Measurements of the public mood derived from millions of tweets can predict the rise and fall of the Dow Jones Industrial Average up to a week in advance with an accuracy approaching 90 percent, IUB researchers have found.

Associate Professor Johan Bollen and PhD candidate Huina Mao, using two mood-tracking tools to analyze the text content of the large-scale collection of Twitter feeds, found the correlation between the value of the Dow Jones Industrial Average (DJIA) and public sentiment after analyzing more than 9.8 million tweets from 2.7 million users during 10 months in 2008.

One tool, OpinionFinder, analyzed the tweets to provide a positive or negative daily time series of public mood. The second tool, Google-Profile of Mood States (GPOMS), measured the mood of tweets in six dimensions: calm, alert, sure, vital, kind, and happy. Together, the two tools provided the researchers with seven public mood time series that could then be set against a similar daily time series of Dow Jones closing values.

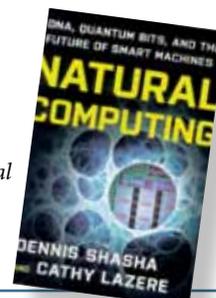
The researchers then correlated the two sets of values — Dow Jones and public mood — and used a self-organizing network model to test a hypothesis that predicting stock market closing values could be improved by including public mood measurements.

Organization (NISO) will share the Mellon Foundation grant designed to build upon the Metrics from Scholarly Usage of Resources (MESUR) project that Bollen began in 2006 with earlier support from the foundation.

## [BOOKSHELF]

### Mills highlighted

Computer science professor Jonathon Mills is one of 15 computer scientists highlighted in a new book called *Natural Computing*, written by Dennis Shasha and Cathy Lazere.



# IMPACT IUPUI

Your impact. IUPUI's future.

## IUPUI announces \$1.2 billion capital campaign

**O**n Saturday, October 9, the School of Informatics at IUPUI announced a \$1,000,000 goal as its part of the \$1.2B overall goal of the IMPACT IUPUI Campaign. Co-chairs Denny Sponsel of RJE Knoll Interiors and Julie Meek, clinical associate professor in the School of Nursing, will lead the campaign. Both also serve on the Dean's Advisory Council.

The campaign will focus on four important areas, each with an aim of bringing the young School to the next higher level of excellence:

- **faculty support** — to establish the first endowed Informatics chair at IUPUI
- **scholarship** — to build the much-needed pool of funds to support students, including endowed funds
- **programmatic support** — to provide more out-of-classroom experience such as internships, conference attendance, and research, particularly for underrepresented groups
- **facilities/structure** — to develop research and learning labs

The IMPACT Campaign itself has four themes: urban research, health and life science, uncommon student success, and civic engagement.

Those who consider establishing **endowed chairs** during this important campaign may avail themselves of an opportunity to double their contribution through use of available **matching funds**.



Bantz

"Going forward," said IUPUI Chancellor Charles Bantz, "the campaign will enable IUPUI, with its deep and longstanding involvement with the community, to bring more intellectual capital and research dollars to our state, accelerating the economic engine. Through financial support and internships for our students, and professional partnerships between the institution and business, government and nonprofit entities, we will create 'brain gain' as students and others choose to stay in our state. We will intentionally develop academic programs and research portfolios that address the educational and economic development needs of the city and state of which we are a part."



### [CAMPAIGN INFO]

Find out more about how you can help at: [www.impactiupui.iupui.edu](http://www.impactiupui.iupui.edu)

# [ALUMNI]news

Accomplishments, events, and life changes

## Still growing after 10 years...

You belong to a growing alumni network. The School of Informatics Alumni Association hosts events **all over the country**.

To get involved in alumni leadership, blogging, or volunteering with current students, or for more information about IUAA membership, contact Danny Kibble at [djkibble@iupui.edu](mailto:djkibble@iupui.edu) or Rachael Jones McAfee at [mcafee@indiana.edu](mailto:mcafee@indiana.edu).

**Below:** This fall the School of Informatics celebrated its 10-year anniversary with events in Indianapolis and Bloomington.



**Above:** Cindy Padnos speaks to alumni in Mountain View, Calif., during the IU Bay Area Professional Networking Series.

**At left:** The fall Bay Area IT Professional Networking event was held in October at TechMart in Santa Clara, with guests **David Becker** of First Internet Bank of Indiana, **Matt Palmer** of Pareto Networks and **Telle Whitney** of the Anita Borg Institute for Women and Technology.



**Above and top right:** April brought alumni in the Bay Area out to the Computer History Museum in Mountain View for the spring installment of the IU Bay Area IT Professional Networking Series. Panelists included **David Krane** from Google, **Cindy Padnos** from Illuminate Ventures, and **John Shoemaker** from SonicWall.

**On page 18 and at right:** In August, Chicago's Navy Pier Beer Garden was the venue for the Summer Informatics Meet-Up. Spectacular weather, a great location, and a solid turnout of alumni and representatives from the school made this get-together a fantastic summer networking opportunity.



**OkTECHberfest:** Alumni gathered in Indianapolis for networking and some great fall snacks and gourmet beer at OkTECHberfest on Oct. 27. A door prize raffle was held for IUPUI mens and women's basketball tickets and IUB men and women's basketball tickets.

## CALL FOR *nominations*

### Nominations are now being accepted for the 2011 IU School of Informatics Awards.

Presented by the school's Alumni Association and Dean's Advisory Council, these awards recognize individuals for outstanding career achievement, service, and contributions to the field of informatics.

Criteria, an online nomination form, and more information can be found at [www.alumni.iupui.edu/informaticswards.html](http://www.alumni.iupui.edu/informaticswards.html). Nominees can be from either the IUB or the IUPUI campuses.

Questions? Please contact Danny Kibble at [djkibble@iupui.edu](mailto:djkibble@iupui.edu), (317) 274-2289 or call toll-free (866) 267-3104.



Virginia Richardson, recipient of the 2010 Young Alumni Award

## class notes

In February, I-Man **Peter T. Wong**, BA'74, MBA'76, MS'79, became chief executive of HSBC Holdings for the Asia-Pacific region. He previously served as the Asia-Pacific executive director of HSBC and general manager of HSBC Group. Wong joined the company in 2005 and previously served in executive level positions with Citibank and the Standard Chartered Bank in Hong Kong.

A former high-school track and basketball athlete, Wong played on the Hoosiers' soccer team during his time at IU. He credits his love of sports as a major contributor to his success in the field of banking. Wong lives in Hong Kong.

This spring, **Scott Jones**, BS'84, ScD'02, co-founder of ChaCha Search and IU computer science alum, participated in Lemonade Day downtown Indianapolis. Lemonade Day, a nationwide initiative that teaches kids how to start their own business using a lemonade stand, started in Houston in 2007 with about 2,600 stands. In 2010, the event was held in 14 major cities across the country.

**Katie Siek**, MS'04, PhD'06, and **Jeremy Siek**, PhD'05, who both received PhDs in computer science in Bloomington and now are on faculty at the University of Colorado in Boulder, have been named Distinguished Visiting Fellows for the Scottish Informatics and Computer Science Alliance and spent this summer in Scotland.

**William J. Terrell**, BS'07, is employed by Science Applications International Corp., a scientific, engineering, and technology applications company, in Bloomfield, Ind. He is also working on a master's degree in information systems at the IU Bloomington Kelley School of Business. In May he married Kelly E. Gillespie, BS'07, who works for Raydar & Associates, a veteran-owned consulting corporation that provides technical, logistical, and project management services for state and federal government, defense, and industrial sectors, in Odon, Ind. The couple lives in Bloomfield.

**Christopher M. Horan**, BS'09, lives in St. Louis and works as a programmer and analyst for the Boeing Co. He writes, "It's very rewarding knowing the products and services the Boeing Co. provides our military and the security of our nation." Horan began graduate studies in information management at Washington University in St. Louis in January.

Enter your class note online: [alumni.indiana.edu](http://alumni.indiana.edu).  
Join us: [facebook.com/IUALUMNI](https://www.facebook.com/IUALUMNI) or Twitter [@IUAA](https://twitter.com/IUAA).

### Upcoming & recent events for alumni

**Nov. 20** • Informatics brunch, Washington, D.C.

**Dec. 8** • IUPUI Holiday Night, Children's Museum of Indianapolis, 6:30- 9 p.m.

**Feb. 12** • One Day U, "Wired: Our Infatuation with Technology," featured speaker alumna Scott Jones

**Feb. 25-27** • Winter College, Miami, [alumni.indiana.edu/wintercollege](http://alumni.indiana.edu/wintercollege)

For details or reservations, e-mail Danny Kibble at [djkibble@indiana.edu](mailto:djkibble@indiana.edu) or Rachael Jones McAfee at [mcafee@indiana.edu](mailto:mcafee@indiana.edu).

PLEASE JOIN US!



February 25-27, 2011

Miami, Florida | Biltmore Hotel

An exploration of vibrant Latin culture in intimate, relaxed educational sessions with distinguished IU faculty serving as your guides.

Winter College 2011 in Miami, a dynamic cultural city—the ultimate domestic weekend destination.

Register online: [alumni.indiana.edu](http://alumni.indiana.edu) or [alumni.iupui.edu](http://alumni.iupui.edu)

INDIANA UNIVERSITY  
ALUMNI ASSOCIATION

[SOIC SNAPSHOT]



The 2010 Grace Hopper Celebration of Women in Computing was held in Atlanta in early October. This year, the School of Informatics and Computing took 25 computer science students to the conference, pictured here with faculty members and alumni.