

# INDIANA **informatics**

FALL 2011  
Vol. 9, No. 1



## The Next Generation

The Rise of Women  
in Technology [p. 10]



SCHOOL OF INFORMATICS  
INDIANA UNIVERSITY

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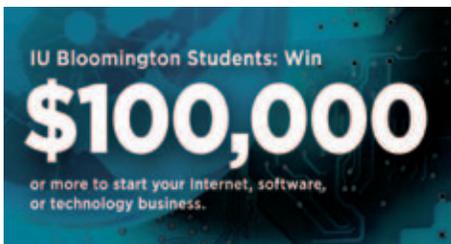
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This semi-annual publication is produced by the IU School of Informatics to provide useful information and news to alumni and friends of the school.

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On the cover: Kelsey Yost, BS'10, represented Discover at the SOIC Women in IT Networking Event in conjunction with the Fall Career Fair.

## Pacesetters in the participation of women in technology

Since its inception, the School of Informatics has made diversity, particularly the inclusion of women students and faculty, a priority. When I arrived as dean in 2007 it was inevitable that this priority would continue, given my role as a co-founder and executive team member of the National Center for Women & Information Technology (NCWIT), as well as in alliances that work to increase the participation of African-Americans and Hispanic-Americans in computing education and research. Indeed, our school is becoming a national leader in diversity in computing, particularly in the participation of women.

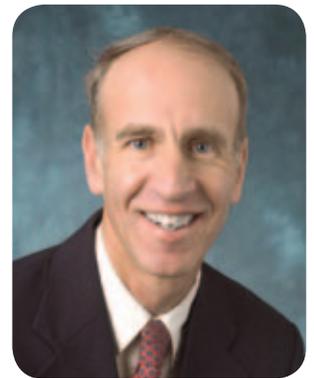
There are two questions I am asked most often in this regard: why is diversity, including the participation of women in computing important, and what's the secret to success? I'll comment briefly on both.

The leadership of NCWIT (Lucy Sanders, CEO; Telle Whitney, CEO of the Anita Borg Institute for Women and Technology; and myself) discuss the first question constantly, whether with federal or state government officials, industrial leaders, academics, or the media. Our answers are, in priority order: 1) diverse teams that reflect the markets for which they are creating products lead to greater innovation and economic success, 2) our nation needs to draw upon its full population if it is to successfully meet the nation's ever-increasing need for a skilled professional IT workforce, and 3) our entire population should have access to the excitement and intellectual and economic opportunities afforded by computing and IT.

I'll throw in a personal reason that really is a variant of the first (innovation) argument. At least for me, more diverse groups of people – by gender, race, and nationality – are more intellectually stimulating as well as more fun. I feel like this leads to better thinking and better results. I'd be quite unhappy living in an all-male workplace; you'll have to ask my female computing colleagues whether they have the complementary opinion!

Roughly two years ago, the Bloomington portion of our school set the goal of doubling the number of women undergraduate majors from 75 to 150 (in computer science and informatics combined). We didn't just meet our goal, we achieved it in only 18 months! Inevitably this leads to questions of how

we achieved this and whether there is a magic bullet. Not surprisingly, the answer to the second question is "no." I always tell people that the ingredients for success are a significant leadership commitment and comprehensive attention to the broad spectrum of issues that impact students. These range from recruitment that accurately portrays the excitement of the discipline, to providing a supportive environment within courses, academic activities, and beyond, and to paying attention to course content and assuring that it appropriately reflects the broad nature of computing. Led by assistant dean Maureen Biggers, our school has become a national pacesetter in producing such a comprehensive approach.



Dean Bobby Schnabel

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**“ROUGHLY TWO YEARS AGO, THE BLOOMINGTON PORTION OF OUR SCHOOL SET THE GOAL OF DOUBLING THE NUMBER OF WOMEN UNDERGRADUATE MAJORS FROM 75 TO 150 (IN COMPUTER SCIENCE AND INFORMATICS COMBINED). WE DIDN'T JUST MEET OUR GOAL, WE ACHIEVED IT IN ONLY 18 MONTHS!”**

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Over the past several decades, computing itself has become far more diverse – evolving from a discipline primarily concerned with making computers function effectively and using them for data processing and scientific calculations, to one that fundamentally impacts virtually all aspects of our lives – from how we work, to how we inform ourselves about the world, to how we socialize with others. This diversity inevitably has made the field appealing to a more diverse set of people, and it is exciting for our school and discipline to harness that potential!

*Bobby*

# [HAPPENINGnow]

Notes and news about Informatics today



## Putting their BEST foot forward

IUB seniors and grad students are working on their BEST ideas this fall, hoping to win \$100,000 to start their own company. A group of 10 investors, led by Matt Ferguson (CareerBuilder), Scott Dorsey, BS'84, Hon. DsC'02 (ExactTarget), Mary Delaney (Luceo Solutions LLC), and the IU Research and Technology Corporation, has created a \$1.1 million fund to support \$250,000 in annual prize money to Indiana University Bloomington students who submit the best business plans for a student-led company focused on Internet and software technology.

The BEST – Building Entrepreneurs in Software and Technology – competition will be managed by the IU Bloomington School of Informatics and Computing and the Kelley School of Business and will be held in three phases over the course of two semesters each year. The annual prizes for BEST will be the largest in the world offered by a university solely to its students in a business plan competition. The first-place winner will be guaranteed at least \$100,000 to invest in their company, with the remaining prize money distributed among selected finalists. The competition will culminate in mid-April when finalists will make their final public presentations. For more information on the competition, visit [www.best.indiana.edu](http://www.best.indiana.edu).

## Summer camp going strong

This summer marked the seventh year that high schoolers from around Indiana and surrounding states converged on the Bloomington campus for the annual Informatics and Computing Summer Camp. Late June brought 59 campers from as far away as Florida to campus, where they enjoyed a week of learning all about technology and experiencing life like a college student!



Students from all over the country came to summer camp for a week of learning, fun, and friendship.



# Schnabel goes to Washington

## Championing K-12 computer science education

Dean Bobby Schnabel had a one-day stop in Washington, D.C. in September where he warned members of a U.S. Congressional subcommittee on science, space, and technology that the United States could lose tremendous job opportunities if more isn't done to teach computer science in grades K-12.

Schnabel, who is chair of the Association for Computing Machinery's (ACM) Education Policy Committee, said university computing and information technology graduates were meeting the needs of the workforce, but that there were too few of them.

"K-12 computer science education is currently focused on basic skills, which teach students how to consume technology, versus acquiring deeper knowledge and skills which teach them to create new technologies," Schnabel told members of the U.S. House of Representatives Subcommittee on Research and Science Education.

"Further, only nine states 'count' computer science courses toward a core academic graduation credit, and, finally, few states have robust teacher certification programs for K-12 computer science teachers."

The ACM is making specific recommendations on ways to overcome the systemic issues facing K-12 computer science education which include creating state planning and implementation grants for computer science K-12 curriculum, building national networks of support for K-12 computer science education, and creating pre-service and professional development opportunities for K-12 computer science teachers.



Photos by Jay Mallin

## High aspirations for women



The National Center for Women & Information Technology (NCWIT), along with Indiana STARS, an Indiana University-led consortium of state universities and local corporate sponsors, have kicked off the second annual Indiana Aspirations in Computing Award competition.

Twenty young women will be recognized for their computing-related achievements and interests in a competition that is part of a nationwide effort spearheaded by NCWIT to introduce young women to leadership opportunities in the field of computing, to generate visibility for women's participation in the field, and ultimately to encourage more young women to choose careers in technology. Winners are selected based

on their outstanding aptitude and interest in technology and computing, leadership ability, academic history, and plans for post-secondary education.

Winners will be notified in early December and will be honored at an awards celebration in Indianapolis in January 2012. All young women in grades 9-12 in Indiana are eligible to enter. Each winner will receive \$250, scholarship opportunities from several computing departments throughout the state of Indiana, engraved plaques for themselves and their school, a T-shirt, and a gift bag.

"Encouraging young women's interest in technology careers is critical. Our workforce needs their creativity and innovation," said Lucy Sanders, CEO and co-founder of NCWIT. "This award allows us to recognize and encourage talent that might otherwise be overlooked."

## A brave new world

Spring and summer welcomed another round of commencements and celebrations for the School of Informatics. Ceremonies were held in Bloomington and Indianapolis, with the School welcoming 540 new alums. Both IUPUI and Bloomington hosted commencement dinners. IUPUI gathered at Meridian Hills Country Club and IUB at the Indiana Memorial Union.



Photo by Kendall Reeves

Over 550 students, parents, faculty, and staff attended IUB's commencement festivities this year.

## Webby sweep

The School of Informatics and Computing website ([www.soic.indiana.edu](http://www.soic.indiana.edu)) was awarded the highest honor in the web world this summer when it won the 2010 Webby Award in the School/University category. The Webby Awards, the leading international award honoring excellence on the Internet, are presented by the International Academy of Digital Arts and Sciences, which includes an executive 750-member body of leading web experts, business figures, luminaries, visionaries, and creative celebrities. SOIC also won the People's Voice Award in our category, an award that is voted on by the general public. This year's competition had nearly 10,000 entries from all 50 states and 60 countries worldwide.



Actress Lisa Kudrow hosted the 15th Annual Webby Awards ceremony in June in New York City.

## [OF NOTE]



## Connected!

The annual School of Informatics and Computing Fall Career Fair was held in September at the Indiana Memorial Union's Alumni Hall. As usual, attendance was stellar and enthusiasm was high! 580 students visited with 210 employer representatives from 78 companies over the course of the one-day event. There were 85 IU alumni in attendance with their employers. This year's fair was followed by the second annual Women in IT Networking Event, which brought together over 100 female students and employers for education and networking around the topic of recruiting and retaining women in information technology.

# IUB adds new faculty



Ahn



Newton



Sterling



Swany

The School of Informatics and Computing has announced the appointment of four new faculty members in Bloomington. Yeog-Yeol Ahn, Ryan Newton, Thomas Sterling, and D. Martin Swany will be joining the School's faculty this academic year, bringing the School's Bloomington-based faculty total to 62.

Assistant Professor **Yeog-Yeol Ahn** received his PhD in physics in 2008 at KAIST (formerly known as the Korea Advanced Institute of Science and Technology) in South Korea. His research focuses on the structure and dynamics of complex systems, such as society and living organisms. He will join the School's complex systems group.

Assistant Professor **Ryan Newton**, who holds a bachelor's degree in computer science from IU, completed his PhD at MIT where he worked in the Computer Science and Artificial Intelligence Lab (CSAIL). His research interests include compiler construction, language design, and novel parallel architectures. He will be a member of the computer science faculty and teach an advanced topics class on domain-specific languages this fall.

Professor **Thomas Sterling** comes to IU from Louisiana State University where he was the Arnaud and Edwards Professor of Computer Science. After receiving his PhD from MIT as a Hertz Fellow, he worked at the Harris Corporation, the IDA Supercomputing Research Center, the NASA Goddard Space Flight Center, and the University of Maryland before taking a joint appointment as a principal scientist at the NASA Jet Propulsion Laboratory and as a faculty associate at Caltech's Center for Advanced Computing Research. Dr. Sterling is best known as the "father of Beowulf" for his pioneering research in commodity/Linux cluster computing. He is currently involved in several projects that are developing the MIND architecture, an advanced computing component sponsored by NASA. Sterling will share an appointment with the Office of the Vice President for Information Technology (OVPIT).

Associate Professor **D. Martin Swany** comes to IU from the University of Delaware's Department of Computer and Information Sciences. A 2004 recipient of the U.S. Department of Energy Early Career Principal Investigator award, his research interests include high-performance parallel and distributed computing and networking. He will be teaching a class on advanced operating systems this fall. Like Professor Sterling, Swany will share an appointment with the Office of the Vice President for Information Technology (OVPIT).

## [OF NOTE]

### IU repeats as top IT workplace

Indiana University has once again been recognized by *Computerworld* as one of the Top 100 Best Places to Work in IT. *Computerworld* is considered to be a leading source of technology news and information for IT influencers worldwide, making IU's selection for two straight years a tremendous honor.



## [SECTION FEATURE]



## A thriving HCI/d community

By Grant Carlile, HCI/d master's student

The students of the Human Computer Interaction Design (HCI/d) program pump out a lot of work – between the whiteboard sessions, prototyping, and user testing, they engage in research paper submissions, peer-lead workshops, and design competitions. So it is no mistake that when students graduate they continue the tradition by bringing jobs and internships to current students. The initiatives our students take and the opportunities they cultivate are the basic ingredients for landing the job they want.

Alumni continue to grow our industry footprint – San Francisco, New York, Chicago, San Jose, Seattle, Louisville, and Atlanta – by each year working in more cities and at new organizations. The success of our students is the success of our program. This sentiment is one echoed by our advisors as a reminder of the importance of maintaining a strong community. So when an alumni's organization is looking to add to their team, the current students receive an email about the opportunity. The program's sense of community is enhanced through the cultivation of opportunity we experience from our growing alumni base.

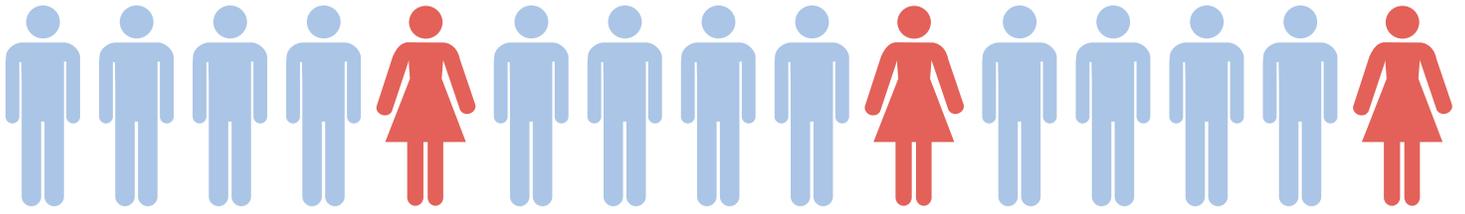
The HCI/d program encompasses three career themes – interaction design; strategic design planning; and research, scholarship, and creative activity. As always, professors Jeffrey Bardzell, Shaowen Bardzell, Eli Blevis, Martin Siegel, and Erik Stolterman closely support their students, encourage interdisciplinary activity, and bring academic and industry awareness to the program.

Although our gatherings are in constant flux – the HCI/d family remains one of initiative. Our Mad Skills Club, Sushi Night, Book Club, and Patoka Trip are just a handful of the activities that go on.

In May, a group of master's and PhD students and faculty attended the CHI Conference on Human Factors in Computing Systems in Vancouver, Canada. Attendees spoke on panels, displayed posters, lead workshops, and presented papers. Then in April, our very own Wes Michaels, John Wayne, and Chris Basham lead a workshop titled 'MacGyver Prototyping' at the inaugural MidwestUX conference in Columbus, Ohio. These initiatives are just a few examples of the amazing projects that HCI/d students engage in.

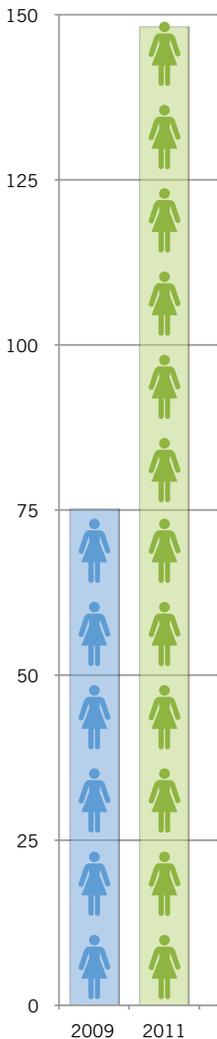
Here are some of my favorite upcoming events:

- **Chicago Ideas Week** (Oct. 10–16)  
[chicagoideas.com](http://chicagoideas.com)
- **TEDxMidwest** (Oct. 14)  
[tedxmidwest.com](http://tedxmidwest.com)
- **The Combine** (Oct. 20–22)  
[thecombine.org](http://thecombine.org)
- **Ignite Bloomington** (Oct. 21)  
[ignitebloomington.com](http://ignitebloomington.com)
- **Bloomington Startup Weekend** (Nov. 18–20)  
[bloomington.startupweekend.org](http://bloomington.startupweekend.org)
- **HCI Connect** (Jan. 20, 2012)  
[hcidconnect.soic.indiana.edu](http://hcidconnect.soic.indiana.edu)
- **TechCoffee** (1st & 3rd Tuesday each month)  
[facebook.com/techcoffee](http://facebook.com/techcoffee)
- **HCI Alumni Weekend** (Apr. 20, 2012)  
[facebook.com/hcidalumniweekend](http://facebook.com/hcidalumniweekend)
- **Interaction** (Feb. 2012)  
[interaction12.ixda.org](http://interaction12.ixda.org)
- **CHI 2012** (May 2012)  
[chi2012.acm.org](http://chi2012.acm.org)



# The Rise of WOMEN in Technology

*By Maureen Biggers, Assistant Dean for Diversity and Education*



We have seen a **97%** increase in women SOIC undergraduate majors in the last 18 months.

In 2009, the School of Informatics officially joined a small number of universities and corporations to become founding members of the National Center for Women & Information Technology (NCWIT) Pacesetters group. The mission? Bring rise to the next generation of the IT workforce through the accelerated recruitment and retention of women. Joining Pacesetters aligned with the School's own goal to become a national exemplar for diversity in computing. And so, our exciting ride began.

We chose to first focus our efforts on the Bloomington campus because the Bloomington informatics program was experiencing steady growth and we wanted to ensure we had a balanced and diverse student population. Our Pacesetter leadership team in Bloomington consists of Bobby Schnabel, dean and a co-founder of NCWIT; Maureen Biggers, assistant dean for diversity and education and co-chair of the NCWIT Academic Alliance; and Dennis Groth, IUB associate dean for undergraduate studies, who has a passion for collaboratively making a difference. Pacesetters were asked to lock in a two-year self-determined goal to increase net new women in computing, and our team did something no other group in the room did, announced that we would double the number of undergraduate women in our programs on the Bloomington campus, from 75 to 150.

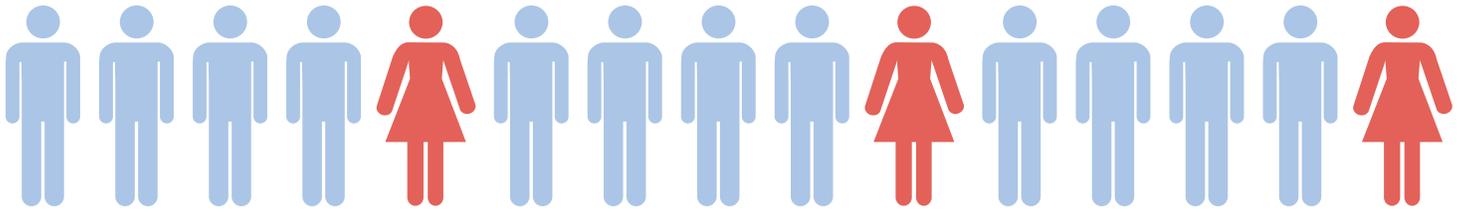
Our leadership team has a solid understanding of the challenges faced nationally with respect to the shortage of women in this field. We also understand the meaning of the phrase, "it takes a village." Well aware that there's no simple

way to tackle this challenge, we adopted a model of change that is promoted by NCWIT. This model is based on simultaneously churning efforts in several areas of our village, much like cogs turning on a wheel. Our strategy involves research-based initiatives in the areas of pedagogy, curriculum, community development, and promoting student success, along with targeted marketing strategies. You'll see that we've had quite a few successes.

Research shows that women envision a career where they work collaboratively and make a difference for people. Unfortunately, we also know that the image conjured up in many minds when they hear "Informatics and Computing" is exactly the opposite. Our own market research tells us that peers, parents, and advisors are the top influencers for the women who take our introductory courses. Our recruiting initiatives focus on leveraging these influencers combined with creating a vision that shows opportunities for creativity, collaboration, and making a difference. Last year the number of women in the introductory course doubled as a result of these efforts.

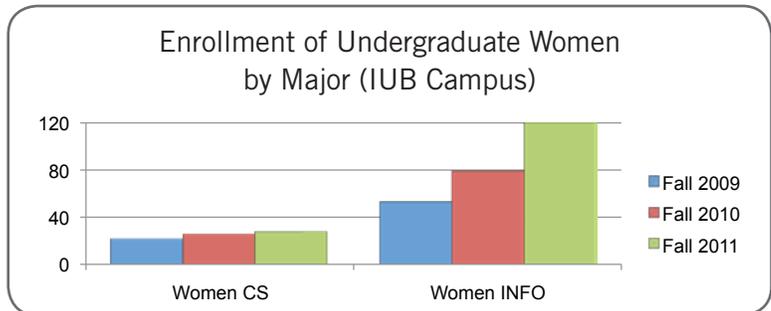
The School's division of undergraduate education has been meeting regularly to focus on learning about, developing, and implementing best practices for student success in the computing classrooms, including curriculum revision in the introductory courses. Retention in our introductory classes is significantly up as a result of this work.

Finally, fostering a strong sense of community has been shown to aid retention. Our students have indicated that it is of utmost importance for them to feel a sense of belong-



Approximately 1 out of 5 SOIC undergraduate students at IUB is female.

“RESEARCH SHOWS THAT WOMEN ENVISION A CAREER WHERE THEY WORK COLLABORATIVELY AND MAKE A DIFFERENCE FOR PEOPLE.”



ing in their academic major, so the School has strengthened social networking opportunities. The Bloomington Undergraduate Women in Computing (uWIC) group formed last year and is active in recruiting and promoting a network of SOIC women. Their tag line is “Networking, Celebrating, and Empowering Undergraduate Women in SOIC.” Sponsors made it possible to take 26 women to the 2010 Grace Hopper Celebration of Women in Computing conference in Atlanta last October, where they experienced being with more than 2,000 women, all who were pursuing their passion for a career in computing. We also have a new student ambassador group that assists with recruiting and is linked to an NSF grant to support an increase in underrepresented talent. Several other new student organizations, each with a slightly different focus, have emerged, and all serve to help students feel a sense of belonging and promote positive peer influence.

As our program in Bloomington is going full tilt, we are also focused on building the same type of “village” within the School of Informatics at IUPUI. In January 2010, a group called Women in Technology (WiT) was formed. Led by a very energized and active group of students, they are a strong presence and are committed to promoting women in computing. Both this WiT leadership team and the IUB student ambassador team have recently received funding from the National Science Foundation to focus efforts on broadening participation in computing through outreach to current and prospective students. We know peers are powerful influencers and look forward to their contributions to the enrollment of women in our programs.

As for our goal of doubling the number of women in our program? After eighteen months, our enrollment of undergraduate women on the Bloomington campus has increased by 97 percent! While undergraduate enrollment overall in the School is increasing, women have increased at a rate of 41 percent while men in the same period increased by 16 percent. We are immensely proud to have reached our goal, and we extend a big thank you to all who worked so hard to get us there! Even so, our overall undergraduate women represent only 18 percent of both informatics and computer science majors. We are improving but clearly we are not there yet! Next goal for this village? Double it again.

## There and back again

By Christina Dunbar, IUPUI media arts and science master's student



Dunbar

When I first stepped onto the Indiana University Bloomington campus in the fall of 2002, I was intent on studying chemistry. But after taking a tour at the School of Informatics during welcome week, I started to consider a degree in informatics. I was impressed by the informatics students’ capstone projects. I found their projects meaningful and chock-full of real-world applications. However, determined to stick to my plan, and unsure of what informatics would actually mean for my future, I continued down the science track.

Seven years later, after completing my bachelor’s degree, I found myself seeking a graduate degree that would present a challenge, align with my interests, and make me more marketable. I researched possible programs and, like seeing an old friend, I came across the School of Informatics at IUPUI. I knew immediately that I had found a good fit with the school’s Media Arts and Science Program.

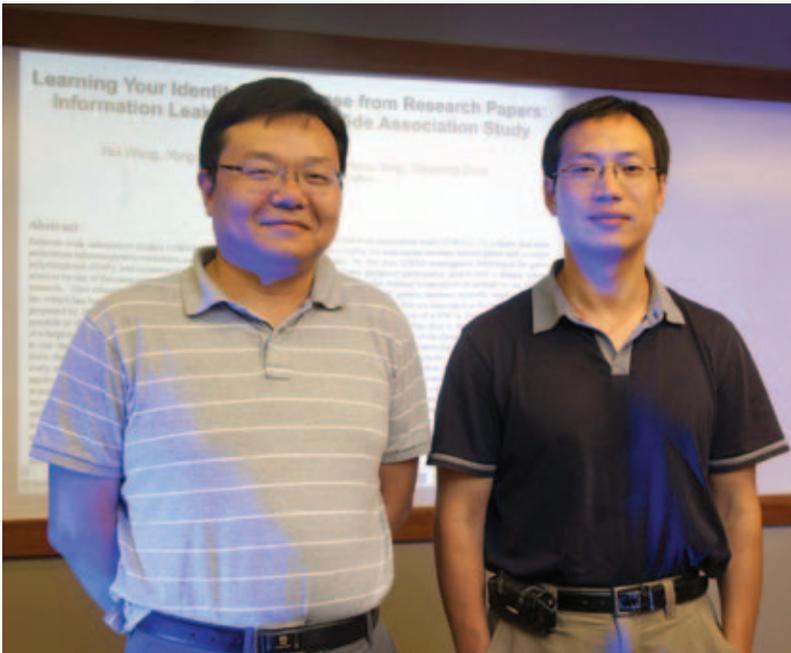
It didn’t take long to notice that there were few women in my classes. This sparked my curiosity about women’s thoughts and experiences when it comes to pursuing or considering a degree in technology. I also wanted to know how I could be a resource to other women in computing and perhaps provide a common space for them to gather on campus.

After speaking with many classmates and students in other technology programs, I helped establish IUPUI’s first Women in Technology (WiT) student organization alongside two other students and with the support of the School of Informatics. WiT at IUPUI is dedicated to improving community by empowering women from all disciplines to utilize technology to make a difference. Through professional development, community outreach, networking, and interdisciplinary research, WiT hopes to support our diverse community of women.

In addition to serving as the president of WiT, I have the opportunity to represent the IUPUI campus as a STARS Leadership Corps member with the goal of making youth aware of the opportunities in computing and encouraging them to explore the many career options in the technology field. Such support and resources are crucial to underrepresented student retention in the computing and technology fields.

I am grateful for the support that I have received at the School of Informatics at IUPUI and how that has shaped my leadership role on campus. Most importantly, I am grateful for the opportunity to make an impact on women and other underrepresented groups as I encourage them to pursue futures in computing and technology.

## Security-bioinformatics collaboration nabs prestigious award



Associate Professors Haixu Tang and XiaoFeng Wang collaborated to win PET Award

SOIC Associate Professors XiaoFeng Wang and Haixu Tang, along with graduate students Rui Wang, Yong Fuga Li, and Xiaoyong Zhou, were awarded the 2011 Award for Outstanding Research in Privacy Enhancing Technologies (the PET Award) for their paper, "Learning our Identity and Disease from Research Papers: Information Leaks in Genome-Wide Association Study." This collaborative team (Wang's research focuses on security while Tang is a bioinformaticist) focused on showing that both individuals and their specific genetic backgrounds could be identified from a relatively small set of statistics that would routinely be published in genome-wide association studies (GWAS).

"This work between professors Wang and Tang, experts in computer security and bioinformatics respectively, to produce this outstanding research on genome privacy underscores the importance of collaboration across research areas, which is a hallmark of the School of Informatics and Computing," Dean Bobby Schnabel said. "The school is very proud of their award-winning accomplishments."

Congratulations to the entire team!



Bolchini

## Bolchini named IEEE Senior Member

IUPUI HCI professor Davide Bolchini has been elevated to the grade of Senior Member in the Institute of Electric and Electronics Engineering (IEEE). IEEE is the world's largest professional association dedicated to advancing technological innovation and excellence for the benefit of humanity. The IEEE reserves Senior Member status for only the top 12 percent of its approximately 400,000 members, and it is bestowed upon members with at least 10 years of professional experience, at least five years of significant research performance in terms of technical contribution and professional leadership, and endorsement by at least three IEEE Fellows or Senior Members.

Bolchini received his MS and PhD in communication sciences from the University of Lugano in Switzerland. He is known for his important contributions to user-experience design methodologies for large-scale web and hypermedia systems, requirements engineering, and usability. Bolchini currently serves as principal investigator on a National Science Foundation grant aimed at enhancing web navigation through the use of auditory senses.

## Truthy team strikes again

Indiana University's Truthy team – four IUB informatics and computing professors who last year received international media attention after establishing a watchdog website to identify political astroturfing occurring via Twitter – has received a National Science Foundation grant of \$905,000 to broaden work analyzing the massive stream of public data found in large-scale social media networks.

Professors Fil Menczer, Alessandro Flammini, Johan Bollen, and Alessandro Vespignani will be focused on creating a model that captures the shared traits of information diffusion processes in different social networking sites while still accounting for their diverse structures and interfaces. They would like to determine whether there are different definable types of information-spreading behavior, and if so, whether they might be identifiable through formal mathematical models. Eventually they will create and maintain a web service that allows people to follow trends, much as they did with the politically-oriented [truthy.indiana.edu](http://truthy.indiana.edu) last year, and which they say could have the potential for detecting hate speech or subversive propaganda and for preserving open debate.

### [OF NOTE]

## IUPUI Informatics sponsors bioinformatics workshop in India

Strengthening a relationship formed last year with the National Institute of Technology Calicut (NITC), the IUPUI School of Informatics sponsored the second annual International Symposium on Biocomputing (ISB) in September in Calicut, India. This two-day workshop focused on furthering international research collaborations among biotechnology and bioinformatics scholars, engineers, and scientists. IUPUI Associate Dean of Graduate Studies and Research Mathew Palakal served as ISB co-chair and was a featured speaker.

## NSF grant to support work that could benefit underserved older adults



Associate Professor  
Kay Connelly

A \$500,000 grant from the National Science Foundation will help SOIC researchers better understand how technologies can assist underserved older adults. The grant has been awarded to IUB Associate Professor Kay Connelly and Principal Research Scientist Kelly Caine, co-directors of the Pervasive Health Information Technology (PHIT) lab and core members of the Center for Law, Ethics, and Applied Research in Health Information.

“The shifting demographics associated with an aging population require novel solutions to meet the health needs of the growing number of older adults around the world,” Connelly said. “Since caring for individuals in assisted-living and long-term care facilities costs nearly twice that of care for their non-institutionalized counterparts, and older adults prefer to stay in their own home, technologies that support aging in place are one way to address these pressing problems.”

Connelly and Caine's research will focus primarily on individuals from rural areas and underprivileged urban areas which are the groups at the highest risk for extensive care and services. The project will ultimately provide guidance to community members, service providers, and

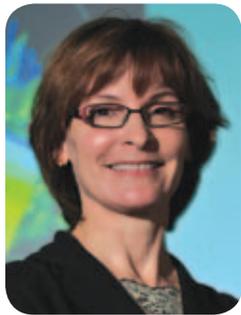
governmental agencies about how to wield technology to enable those populations to age in place. Researchers will identify and analyze existing technologies, then compare and contrast those with the specific needs of low-socio-economic-status older adults. Once the guidelines are established, Connelly and Caine will customize a suite of technologies for the specific needs of the two populations. The researchers will then be able to assess how older adults use and adjust to the technologies, and how that may help their ability to age in place.

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“THE SHIFTING DEMOGRAPHICS ASSOCIATED WITH AN AGING POPULATION REQUIRE NOVEL SOLUTIONS TO MEET THE HEALTH NEEDS OF THE GROWING NUMBER OF OLDER ADULTS AROUND THE WORLD.”

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## Plale, IU Data to Insight Center to lead project on non-consumptive research



Plale

IU's Data to Insight Center, led by IUB informatics and computing professor Beth Plale, will lead a \$600,000 grant from the Alfred P. Sloan Foundation to fund the first investigation of non-consumptive research for a major mass digitized collection of content. Non-consumptive research involves computational analysis of one or more books without the researcher having the ability to reassemble the collection. Rather than reading

the material, researchers use specialized algorithms to analyze text as a massive data set and the Sloan grant will help ensure the work can be conducted in a secure environment. Partners on this research endeavour include the HathiTrust Research Center (HTRC) and the University of Michigan's Department of Electrical Engineering and Computer Science.

### [OF NOTE]

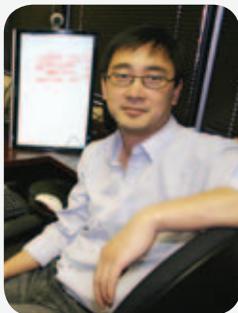
## Crandall paper receives honors at CVPR conference

IUB professor David Crandall was part of the team that was awarded Best Paper Honorable Mention at the annual Computer Vision and Pattern Recognition (CVPR) conference in Colorado Springs this summer. The team of Crandall, Andrew Owens, Noah Snavely, and Daniel Huttenlocher received the honor for their paper entitled, "Discrete-Continuous Optimization for Large-scale Structure from Motion."

## IUPUI recognizes outstanding faculty



Bolchini



Chen

IUPUI faculty members Davide Bolchini, Jake Chen, Josette Jones, and Susan Tennant were recently recognized for their hard work, dedication, and achievement during the 2010-2011 academic year.

**Davide Bolchini**, assistant professor of human-computer interaction, received the School of Informatics Excellence in Instruction Award. This distinction is awarded to a full-time faculty member exhibiting superior instructional effectiveness and a commitment to scholarship and scholastic innovation.

The School of Informatics Research and Creative Activities Award went to **Jake Chen**, associate professor of bioinformatics and director of the Indiana Center for Systems Biology and Personalized Medicine. This award is bestowed upon a full-time faculty member demonstrating outstanding accomplishments in research based on publications, external grant support, and other scholarly activity.

**Josette Jones**, assistant professor of health informatics was the recipient of the IUPUI Trustees Teaching Award. This distinguished honor is given to faculty who demonstrate a positive impact on student learning and a sustained level of teaching excellence.

Media arts and science professor **Susan Tennant** received a RISE Challenge Course Development Grant. This summer stipend is awarded to IUPUI faculty to create and develop courses as part of IUPUI's RISE Initiative that seeks to engage students in research, international service, and experiential learning. The grant will be used to support Tennant's summer course in Paros, Greece where students work to preserve cultural heritage through digital documentation.

Congratulations to all honored faculty for their accomplishments this past year!



Jones



Tennant

# [INdevelopment]

Honoring the service and accomplishments of alumni and friends

## Degrees of value

### Investing in the Bloomington Annual Fund



Matt vandenBerg  
Director of Development

Did you know that your participation in the School's annual giving program enhances the value of your degree?

It certainly does. All gifts to the School – regardless of the amount – are important investments that enable us to produce groundbreaking research, offer leading-edge degree programs, supply employers with well-equipped students, and drive economic development. As we continue to build on our strong reputation, and to gain recognition for these important accomplishments, the value of every graduate's degree increases commensurately.

With state funding levels in Indiana declining, and IU and the School aiming

to keep tuition as affordable as possible, philanthropic support plays an increasingly important part of the School's long-term viability. As a relatively young school with a promising future, we must build a strong foundation of philanthropic support from our alumni, parents, faculty, staff, and friends.

To build that foundation for the Bloomington campus, the School formally launched the inaugural Annual Fund this year.

Generally, the program provides direct scholarship funding to our informatics and computer science students and supports critical and otherwise unfunded programs and operational needs. Every donor may decide how they wish their gift to be applied.

The early response to this important effort has been generous, enthusiastic, and inspiring. From January through October, we are proud to announce that we have already raised more than \$53,000 in Annual Fund support!

Encouraged by our early success, we aim to surpass a minimum Annual Fund goal of **\$75,000 by December 31**. With your participation, we know that we can reach this important goal together.

As you reflect on the role that the School has played in your life, as well as the importance of informatics and computing on the future of Indiana, the U.S., and the world, please carefully consider your own commitment to the Annual Fund. Your gift, regardless of its size, will help us to send a strong, unified message that our School merits substantial philanthropic investment.

Your gift is an investment that will make you feel terrific, provide you with significant tax advantages, and yes – enhance the value of your degree.

For more information, or to make your investment, please visit: [www.soic.indiana.edu/support](http://www.soic.indiana.edu/support).

## CALL FOR *nominations*

### Nominations are now being accepted for the 2012 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 and computing.

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 IUPUI campuses.

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



Bobby Schnabel with 2011 award winners (left to right): Don Aquilano; Scott Jones, BS'84, Hon. DsC'02; Brad Gessler, BS'04; and Steve Hodges, BS'04. Not pictured: Mary McKenzie, MS'73.

# [ALUMNInews]

Accomplishments, events, and life changes



Clockwise from top left:

This July, alumni gathered at The Tasting Room in Chicago for an evening of networking.

Paul Barryhill, BS'04 and Scott Denninger, BS'06 joined the Informatics Alumni Association for a networking event at the Rathskellar in Indianapolis this summer.

In April, the School hosted the spring edition of the Bay Area IT Professional Networking Series at Google in San Francisco. Pictured with guest speaker Vivek Wadhwa (center) are Peter Mui and Dean Bobby Schnabel.

## Opportunities abound

Being an IU alum means that no matter where you live, there's always a networking event nearby. And, the Informatics Alumni Association is bringing more and more technology-related events to a growing number of locations around the country. Join us.

To get involved in alumni leadership and events, contact Danny Kibble at [djkibble@iupui.edu](mailto:djkibble@iupui.edu) or Rachael Jones McAfee at [mcafee@indiana.edu](mailto:mcafee@indiana.edu).



## The Hoosier Open Golf Outing & Dinner

**Monday, February 13, 2012**

**10:30 am**

**Quail West Golf and Country Club  
Naples, Florida**

This event, in its second year, will feature an outstanding speaker from Hoosier Athletics, a round of golf, and a special dinner for all alumni and friends. The cost for golf and dinner is \$275. Not a golfer? Tickets for dinner without golf are \$100 per person. The event is sponsored by IUAA, the Varsity Club, and the IU Foundation.

Questions? Contact Jacquelyn Beane at [jibeane@indiana.edu](mailto:jibeane@indiana.edu) or (812) 855-7352.

**Special Florida Package:** Extend your trip to include both the Hoosier Open Golf Outing and Dinner and Winter College (see advertisement on inside back cover). Book the Florida Package for the low price of \$600 before the end of 2011 and save \$70!

# WE ARE IU!

"We Are IU!" – IU's national and international on-the-road tour – gives alumni and friends a chance to connect with IU at an extraordinary event celebrating Indiana University. We feature a current student speaker, multimedia presentations to take you back to campus, and special guests from the university – including IU President Michael McRobbie. This year, the IU Foundation is proud to partner with us on the "We Are IU" tour.

Past tour stops have included New York City, Washington, D.C., Dallas, Chicago, Taipei, Seoul, and Berlin, to name just a few. Look for an upcoming event near you, and plan to join us for this insider's event!

Nov. 10, 2011	Atlanta
Jan. 24, 2012	Washington, D.C.
Feb. 9, 2012	Sarasota, Florida
Feb. 11, 2012	Naples, Florida
March 3-10, 2012	Southern and Northern California, Seattle, and Phoenix
March 5, 2012	San Francisco
March 7, 2012	Los Angeles
March 8, 2012	San Diego
April 5, 2012	Cincinnati
April 17, 2012	Washington, D.C.
May 23, 2012	Denver
June 2, 2012	Chicago

Questions about We Are IU? Contact Jacquelyn Beane at [jibeane@indiana.edu](mailto:jibeane@indiana.edu) or (812) 855-7352, or visit [www.alumni.indiana.edu/together/we-are-iu](http://www.alumni.indiana.edu/together/we-are-iu).

[CONNECT]

Check out the new Informatics Alumni Association Website!  
[iuiinformaticalumni.org](http://iuinformaticalumni.org)

# class notes

## 1980s

**Kevin R. Erdman**, BS'84, an attorney who advises high-tech and Internet companies, has joined Barnes & Thornburg as a partner in the firm's national intellectual property department. Working out of Barnes & Thornburg's Indianapolis office, he concentrates his practice on information, Internet, and intellectual property law, with a focus on patent, copyright, and trademark issues. Erdman, who was previously a partner at Baker & Daniels, also counsels clients on privacy issues. A regular contributor to publications and a frequent speaker on topics of intellectual property and information security issues, he has been selected for inclusion in *Best Lawyers in America* every year since 2008, and has also been listed as an Indiana Super Lawyer. Erdman lives in Indianapolis.

## 1990s

While working on a doctorate in computer science at IU in the early '90s, **Ian C. Rogers**, BA'94, created a fan site devoted to the Beastie Boys, one of his favorite bands. The site caught the eye of the Beastie Boys' manager who was so impressed he recruited Rogers to manage the act's music digitally. Now chief executive of Los Angeles' Topspin Media, Rogers, 38, helps musicians such as Paul McCartney, David Byrne, and Eminem, market and sell music to fans online. Topspin's range of software products allows bands to stream songs and videos on websites and Facebook pages and creates customized e-commerce sites to help bands sell albums and merchandise. Another of Topspin's major clients is – you guessed it – the Beastie Boys!

**Hans-Joerg Tiede**, MS/PhD'99, has been promoted to full professor in the Department of Mathematics and Computer Science at Illinois Wesleyan University in Bloomington, Ill. His most recent publication, "Inessential Features and Expressive Power of Descriptive Metalanguages," appeared in *Features: Perspectives on a Key Notion in Linguistics*, edited by Greville Corbett and Anna Kibort. Tiede and his wife, Moreena (Bond), MA'98, regional coordinator of the organ and tissue donor program in the Illinois Secretary of State office, live with their daughters Annika and Franciska in Normal, Ill.

## Upcoming alumni events

**Dec. 7** • IUPUI Holiday Night, Children's Museum of Indianapolis, 6:30-9:00 pm

**Feb. 10–12** • Winter College, Naples, FL

**Mar. 3** • Weekend U, details TBD

**Apr. 12** • Informatics Alumni Awards Banquet, details TBD

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)

## 2000s

**William P. Lewis**, BS'03, works as an IT auditor at Cardinal Health Inc. in Dublin, Ohio. He lives in Delaware, Ohio.

**Timothy J. Borek**, MS'09, was hired in June 2010 as member services coordinator of Down Syndrome Indiana in Indianapolis. He also works as a freelance videographer and video editor. Borek's clients have included John Wiley & Sons, Borshoff, and Stream Three Creative. He lives in Westfield, Ind.

**Sarah M. Loos**, BS'09, graduated from IU with bachelor's degrees in both computer science and mathematics. In 2009, she served as co-president of Women in Computing and was named WIC Woman of the Year. Loos is currently a PhD student at Carnegie Mellon University doing research on adaptive cruise control systems in automobiles. She lives in Pittsburgh.

**Justin J. Natale**, BS'09, is a junior business analyst for the Roc Group, a communications consultancy firm in Chicago. He lives in Lemont, Ill.

**Correction:** Kathryn (Wise) Ewing's, class note from the Summer, 2011 issue should have read, "After completing my MA in economics and MPA at the University of Washington, I worked as a fiscal and policy analyst for the City of Seattle. My husband, Andy, recently finished his PhD in economics at UW and is now an assistant professor at Eckerd College in St. Petersburg, Fla. I have joined him and am settling into my new job as a budget analyst at the City of St. Petersburg."

### [CONNECT]

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## AMERICAN VISTAS



*This Land  
Is Your Land*

WINTER COLLEGE 2012

## FEBRUARY 10-12

Naples Grande Beach Resort

A Waldorf Astoria Resort

Naples, Florida

### Expand your mind this February in sunny Naples, Florida!

Winter College, the IU Alumni Association's premier personal enrichment program, will be in session Feb. 10-12. The weekend includes interactive classes led by some of IU's most accomplished professors. Explore this year's theme, "American Vistas: This Land Is Your Land," with fellow alumni and friends at the gorgeous Naples Grande Beach Resort. Don't miss this one-of-a-kind educational experience!

[alumni.indiana.edu/wc](http://alumni.indiana.edu/wc)

**(800) 824-3044**

P.S. Extend your trip to include the Hoosier Open Golf Outing and Dinner, set for Feb. 13 in Naples. Book the Florida Package which includes Winter College and the Hoosier Open for the low price of \$600 before the end of 2011 and save \$70! Details: [iuaa.imodules.com/hoosier-open](http://iuaa.imodules.com/hoosier-open)



INDIANA UNIVERSITY  
ALUMNI ASSOCIATION





# SCHOOL OF INFORMATICS

INDIANA UNIVERSITY

Informatics East  
919 E. 10th St., Room 218  
Bloomington, IN 47408

## [SOIC SNAPSHOT]



Students, faculty, and staff enjoyed the fall weather, food, and live music at the fourth annual SOIC open house on the Bloomington campus. Here, students enjoy the music of Afro-Hoosier International, a band comprised largely of SOIC faculty and staff.