Computer Science Newsletter

Fall 2005 - Spring 2006

State of the Department:

The department continues to refine its graduate and undergraduate programs in Computer Science and Informatics. Our joint graduate program in Applied Mathematics and Computer Science, which began accepting students in 2002, has graduated three students so far and several others are working on their thesis or projects and are planning to finish this academic year. At present, approximately 30 students are pursuing their graduate degree in this program. Our bachelor of science in Computer Science continues to graduate approximately 15 students per year. The majority of these graduates continue to live and work in the area and contribute to our community. The department also graduated its first informatics major in 2005 and currently there are about 20 students in the informatics program. Next year, the department will be conducting a search to hire one or more additional faculty to help develop this new program at IU South Bend.

We are pleased to welcome two new faculty members to our department. Drs. Liguo Yu, Liqiang Zhang and Murli Nair joined the department this Fall. Dr. Yu's area of expertise is Software Engineering. Dr. Zhang's expertise is in the area of Wireless Networks and Mobile Computing. Dr. Nair's expertise is in the area of Bio Informatics. Please stop by their new offices in the first and third floor of North Side Hall (NS160x and NS331) and introduce yourselves.

Recently, the department has made a deliberate push to increase its grant writing activity. Hence, last year marked a record year in faculty involvement in writing grant proposals and obtaining funding. Nearly every member of the department has been engaged in developing and submitting internal and external grants. Drs. Batzinger, Hakimzadeh, Knight, Scheessele, Schwartz, Surma, Wolfer, and Vrajitoru were all involved in grant writing activities. The department continues to be active in its outreach mission. Examples of such activity include faculty and student volunteering efforts to provide expertise to our local and regional non-profit organizations; increased interaction with local and regional educational institutions; internships and professional practice; increased course offerings for non-majors and community members; increased departmental sponsorship of public presentations; development of stronger relationships with our alumni; and the creation of endowments and scholarships in computer science.

Dr. Knight's Retirement:

After nearly 20 years of teaching, one of our best and brightest faculty at Indiana University is retiring. Dr. Knight has been a central figure in the development of every aspect of the computer science program at IU South Bend. Upon completing his studies at Rice University, Stanford University, and U.C. Berkeley, Dr. Knight taught at Pennsylvania State University for a number of years before coming to South Bend in 1977. After teaching Mathematics for a few years, at IUSB and Notre Dame, Dr. Knight found his true love! He obtained a new degree in *"Computer Science"* from University of Illinois (Urbana-Champaign), and began teaching computer science at IU in 1986.

If you haven't had the opportunity to take a course from Dr. Knight, I suggest that you pre-register for spring semester.

Student Chapter of the ACM:

The computer science faculty encourage all computer science and informatics students to join the Student Chapter of the ACM. The ACM (Association of Computing Machinery) is the premier computing organization in the United States. Membership in the Student Chapter is free and has many benefits, including social events (pizza parties), lectures, tutorials and camaraderie with other CS and informatics students. Membership and participation in the ACM can be a plus when you go for that first job interview as well.

You can obtain more information about the ACM and its activities from their web site at www.iusb.edu/~sbacm or email the officers at sbacm@iusb.edu.

Graduate Teaching Assistantship:

For the past three years, the department of computer and information sciences has been offering opportunities for graduate teaching assistants in computer science. Applications for teaching assistantships can be obtained from the department web site at www.cs.iusb.edu/employment.html

Graduate Course Offering:

In addition to some 400-level courses which may be counted toward the graduate program, during spring and summer 2006 the department will be offering the following graduate courses:

Spring 2006:
    A504 Introduction to C++ (2 cr.)
    A506 Object Oriented Programming in C++ (2 cr.)
    A510 Database Systems (for MS-MIT Students only)
    A593 Computer Structures
    A594 Data Structures
    B503 Algorithms Design and Analysis
    B551 Elements of Artificial Intelligence
    B689/C490 Graphics and Human Computer Interaction
    Y790 Graduate Independent Study (1-6 credits)
Summer 2006:
    C490 Advanced Java (3 credits)
    Y790 Graduate Independent Study (1-6 credits)

The Department of Mathematical Sciences is also offering a similar number of graduate courses.

Undergraduate Course Offering:

A side from the standard core courses offered each semester (i.e. C101, C151, C201, C243, C335) the department will be offering the following core and elective courses during the spring and summer semesters:

Spring 2006:
    C308 System Analysis & Design
    C435 Operating Systems
    C455 Analysis of Algorithms
    C463 Artificial Intelligence
    C490 Graphics and Human Computer Interaction
    Y398 Funded Internship Projects (IU-RETAIN and IU-ALUMNI Projects)
Summer 2006:
    A201 Introduction to Programming (Visual Basic .Net)
    C101 Computer Programming I (C++)
    C490 Advanced Java

    Y398 Funded Internship (IU-RETAIN and IU-ALUMNI Projects)

For more details please visit:
    http://www.cs.iusb.edu/class_schedule.html

A New Course:

B689/C490 Advanced Graphics & Human Computer Interaction
This course will explore a variety of contemporary topics drawn from the current literature in Computer Graphics and Human-Computer Interaction to form the basis for the design and implementation of actual projects. Emphasis will be placed on methods and applications for exploring data and interacting with our machines. Sample topics include visualization in science and medicine, data sonification and other audio interfaces, haptic/tactile interaction, speech recognition and synthesis, and gesture recognition along with an exploration of their potential for real-world applications. Supporting technologies will also be introduced, such as the role of AI, hardware, GPU support, stereographics for 3-dimensional display, programming toolkits, and appropriate API's. Prerequisites: One or more of the following: Computer Graphics, Artificial Intelligence, Computer Vision, Biomorphic Computing, Game Programming and Design.

2005 Excellence Award:

Each year the computer science faculty has the pleasure of selecting the excellence award winners in our undergraduate program. Academic achievement is the primary, but not the only criterion for selection.

> The computer science faculty congratulates our 2005 "Excellence Award" winners.
>
> ## Christopher M. Beelby
>
> ## Benjamin J. Kress
>
> ## Dennis L. Hostetler

The John P. Russo Scholarship:

Two years ago, the department established a scholarship in Dr. John P. Russo's name. Numerous, students, alumni, friends and family members have contributed and continue to contribute to this scholarship fund. As a result, this year, the department is happy to announce our John P. Russo scholarship recipients.

The computer science faculty congratulates our 2005

"John P. Russo Scholarship" winners.

Soumya Lingareddy

Poornima Konanur

The purpose of this scholarship is to provide current undergraduate and graduate students majoring in Computer and Information Sciences at IU South Bend with financial assistance in completing their degrees. The basis for the scholarship is demonstrated potential for academic excellence in Computer and Information Sciences. The Scholarship will be awarded annually through the Computer Science Scholarship Committee. You can find additional information about this scholarship online at www.cs.iusb.edu/scholarship/jprusso.pdf.

Advising:

Our department places a heavy emphasis on proper academic advising. To aid the process of advising, the department has prepared an *advising homepage*. Students should consult the advising homepage prior to making an appointment with their advisor. Consulting this web site provides you with a wealth of information and ensures that you have the proper documentation prior to meeting with your advisor. The advising homepage can be found at *www.cs.iusb.edu/advising.html.*

If you have questions or need to make an advising appointment please feel free to contact me, Dr. Knight or other computer science faculty.

Sincerely,

Hossein Hakimzadeh, PhD

Associate Professor

Chair, Department of Computer and Information Sciences

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You may obtain additional information about the computer science programs, courses, laboratories and faculty at www.cs.iusb.edu or by writing to us at

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Are you a good student?

Do you feel unappreciated? No one recognizes your hard work?

Well, we do!

You may be eligible for the "John P. Russo" scholarship. This scholarship has been established to provide current undergraduate and graduate students majoring in Computer and Information Sciences at IU South Bend with financial assistance in completing their degrees. The basis for the scholarship is demonstrated potential for academic excellence in Computer and Information Sciences. The Scholarship will be awarded annually through the Computer Science Scholarship Committee.

Application deadline is March 1.

Application material may be obtained at:

www.cs.iusb.edu/scholarship/jprusso.pdf