

BUCKEYE BLOG



THE OHIO STATE UNIVERSITY

COLLEGE OF ENGINEERING



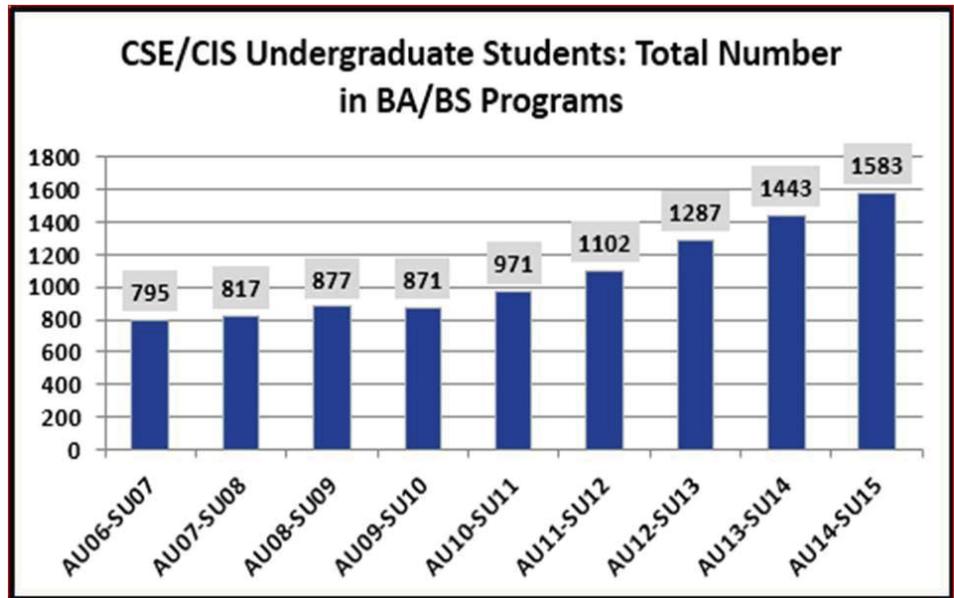
Dear CSE Alumni, Parents, Friends, and Colleagues,

Thank you for reading the CSE newsletter of Fall 2015. As computing has gradually become the center in our daily life and in all the applications in the society, the demand to the CSE education and research has increased accordingly. In the last 9 years, the undergraduate enrollment to CSE and CIS majors has been doubled from the level of 800 to the level of 1,600 (see the enrollment Figure). During the same time period, the selectivity to become a CSE or CIS students has been increased in parallel. In addition, the enrollment to the newly created major, Data Analytics, has also been strong in both quality and quantity. The Ohio State's Hackathon on November 14-15, 2015 attracted more than 500 students not only from the university, from different cities in Ohio, but also students from other States.

We welcome Huan Sun to join the CSE faculty in July 2016, and her research area is in data mining. We will continue to search multiple lines of faculty positions in 2016.

In this issue, we presented accomplishments of CSE faculty, students, and alumni and their impact and contributions to the field and the society. Please keep us informed about your life and work experiences after your graduation, and we will continue to report the progress we have made in the department.

Xiaodong Zhang
Chair and Robert M. Critchfield Professor
Computer Science and Engineering



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The Department: By the Numbers

Faculty

40 Regular Faculty
2 Clinical / Research Faculty
1 Adjunct Faculty

Graduate Enrollment

106 MS Students
199 PhD Students

Research

2015 \$8.3 million
2014 \$7.6 million
2013 \$8.7 million
2012 \$8.3 million
2011 \$7.3 million
2010 \$6.2 million
2009 \$5.6 million

Undergraduate Enrollment

692 Computer Science and Engineering Majors
485 Computer Science and Engineering Pre-Majors
146 Computer and Information Science Majors
256 Computer and Information Science Pre-Majors

Alumni

5,993 BS Alumni
315 BA Alumni
2,276 MS Alumni
516 PhD Alumni

2015 UNIVERSITY DISTINGUISHED SCHOLAR AWARDS



The Distinguished Scholar Award, established in 1978, recognizes exceptional scholarly accomplishments by senior professors who have compiled a substantial body of research. The award is supported by the Office of Research. Recipients are nominated by their departments and chosen by a committee of senior faculty, including several past recipients of the award. Distinguished Scholars receive a \$3,000 honorarium and a research grant of \$20,000 to be used over the next three years.

Dhabaleswar K. (DK) Panda is a world leader in research on high-performance and scalable communication in parallel and high-end computing systems. One of his most significant contributions is the design of a scalable and high-performance communication library for

the popular Message Passing Interface (MPI) programming model for modern supercomputers using InfiniBand networking technology. The majority of supercomputers in the world are currently powered by this software for running a diverse range of high-performance computing applications. Daily, these libraries help tens of thousands of users worldwide from many disciplines advance research and develop products in their respective fields. Panda has extended his research into the emerging areas of big data and cloud computing. He has designed high-performance, scalable designs for Hadoop framework, a common middleware being used for big data analytics, which are available to the public.

According to one colleague, “DK’s fundamental research on designing next-generation communication libraries by exploiting the Remote DMA mechanism of InfiniBand networking technology has made a colossal impact in the field of commodity cluster computing.”

SADAYAPPAN NAMED IEEE FELLOW



CSE Professor P. Sadayappan has become an IEEE Fellow in the 2015 class. The citation of this honor is “for Contributions to Parallel Programming Tools for High Performance Computing”.

The IEEE Grade of Fellow is conferred by the IEEE Board of Directors upon Professor Sadayappan with his outstanding record of accomplishments in the IEEE Computer Society. IEEE Fellow is the highest grade of membership and is recognized by the technical community as a prestigious honor and an important career achievement.

Professor Sadayappan’s primary research interests center around performance optimization and compiler/runtime systems for high-performance computing, with special emphasis on high-performance frameworks that enable high productivity for application developers. One recent research direction with polyhedral compiler optimization has enabled advances in the state-of-the-art for automatic parallelization and data locality optimization. Another research focus has been on domain-specific compiler optimization. For example, the Tensor Contraction

Engine project led by him in collaboration with computational chemists developed a domain-specific compiler that has resulted in savings of decades of person-hours of programming effort, through automatic transformation of high-level specifications into over a million lines of synthesized code for high-performance parallel implementations of dozens of models within the NWChem quantum chemistry suite. Very recent research has also resulted in advances in models, tools, and techniques for characterizing lower bounds on the data movement complexity of computations, which increasingly dominates computational complexity as the primary constraint with respect to both performance and energy efficiency.

COMING FULL CIRCLE TO INSPIRE

From mentee to mentor, Malory Spicer reflects on her experience with an outreach program encouraging young women to explore careers in the arts and sciences.

The “Magic of Disney Animation” ride at Walt Disney World inspired me to be an animator – but it was the Advanced Computing Center for the Arts and Design (ACCAD) at Ohio State that taught me what that involved and how to make my dream become a tangible reality.

I was 15 years old the first time I was selected to participate in ACCAD’s Digital Animation Technology Mentoring Program for Young Women. Started by the director of ACCAD, Maria Palazzi, in 2001, this program welcomes young women in grades 6-8 to come to campus and learn the process, the technology and the filmmaking concepts involved in computer animation. Palazzi challenges the students to consider how animation can be used to explore complex ideas and effect change – designing the program around an environmental or social issue each year and even taking the girls on field trips to do “on-site research.”

Throughout the workshop’s two-week duration, the young women learn to use industry-standard software and technology to create a short film – taking their original ideas from storyboards to fruition in a final film screening for friends and family.

The young women, through the many iterations of this program, have utilized their creativity, problem-solving skills and raw talent to design stories around topics from the Darby Creek watershed and Olentangy River to the importance of recycling and our dependence on the honeybee.

In addition to collaborating in small teams with their peers, the students work closely with a female graduate or undergraduate student mentor.

Computer animation, along with many careers involving technology, has historically been a male-dominated field. Though these numbers are shifting, we cannot overlook the importance of mentoring young women: to instill the confidence, support and empowerment to pursue careers in technology-related fields from a young age.

The women who mentored me as a participant came from a wide variety of specializations – ranging from design and animation to engineering, dance and theater – and it has been continually inspiring for me to follow their careers and see how art and technology play a role in their work.

Making computer animation involves understanding elements of geometry, physics and engineering – in addition to artistic design and development.

Society has created a false dichotomy between creative and analytical, telling students that they must choose to be good at either art or math, science and technology. But computer animation is a prime example of a career that requires both artistic and critical thinking.

Programs like this one at ACCAD, are necessary to further the concept of not just STEM but STEAM education (science, technology, engineering and mathematics + art and design) by giving young women the hands-on experience and fearlessness to explore these areas further.

I returned to the Digital Animation program three years in a row – eager to continue to learn, create and bond with friends who shared my particular interests. Upon graduating from high school in 2008, I got my chance to be initiated into the Buckeye “family” and began my college career in computer science and engineering at Ohio State. After completing my bachelor’s degree, I continued directly into graduate school in the digital animation and interactive media MFA program (through the Department of Design and ACCAD), graduating from there in August.

Since 2011, I have participated in the program every summer, though this time as a mentor rather than a mentee.

Being able to come full circle and give back to the program that inspired me was a most rewarding experience. Regardless of whether students will follow in my footsteps and pursue animation, my hope is that they came away from the experience with an excitement about education and confidence in their abilities to tackle something new or intimidating.

About the author:

Malory Spicer graduated from Ohio State with her MFA in digital animation and interactive media in 2015. She worked for several years as a research assistant on interdisciplinary projects involving art, technology and design at the Advanced Computing Center for the Arts and Design (ACCAD). Spicer also earned her bachelors degree in computer science and engineering from Ohio State in 2012.



18TH ANNUAL EXCELLENCE IN ENGINEERING AND ARCHITECTURE AWARD

Fifteen alumni from The Ohio State University College of Engineering and one community volunteer were honored during the 18th Annual Excellence in Engineering and Architecture Awards on October 9, 2014. Among the honorees was Deborah Shands an alumni from The Ohio State University College of Engineering.

Deborah Shands (MS '88, PhD '94, computer and information science) is a program director for the National Science Foundation's Secure and Trustworthy Cyberspace program, which provides more than \$70 million annually in funding for scientific research and education in the areas of security and privacy. She is on rotation from The Aerospace Corporation where she is a researcher and consulting security architect/engineer for space systems.



CSE ALUMNUS RECEIVED NSF CAREER AWARD



CSE 2010 alumni Feng Chen was awarded the NSF CAREER award early this year. Feng is an Assistant Professor at the Department of Computer Science and Engineering, Louisiana State University.

Project of focus addresses a large-scale deployment of flash devices into data centers can greatly improve the overall system performance and reduce the rapidly growing management cost (e.g., power, cooling, staffing, floor space). Despite the technical merits promised, such a grand technical transition fundamentally changes the long-held system design assumption for a disk-based storage and will inevitably bring major critical challenges in a real-world practice. For example, underutilization of flash space would cause huge economic loss; premature device wear-out may result in catastrophic data corruption; unbalanced system could bring severe resource contention; unoptimized applications may not receive anticipated benefits; and many others.

Feng received his Ph.D. in Computer Science and Engineering at The Ohio State University in 2010 under the supervision of Professor Xiaodong Zhang.

ALUMNI WE WANT TO HEAR FROM YOU!

Do you have an update to include in the next alumni newsletter? Do you have any suggestions for topics you would like to see covered? Do you have any photos from your college days or today that we can include? We want to hear from you! Email us your updates, photographs and suggestions to Tiffany McGough at mcgough.22@osu.edu.

DAVIS RECEIVES THE INNOVATORS AWARD



The College of Engineering conferred The Innovators Award on Dr. James Davis. The Innovators Award for the College of Engineering was established by the Engineering Experiment Station in 2007. The award is presented each year to an individual or team of faculty and/or research scientists who best demonstrate innovation in the development of a product and/or technology originating from the Ohio State research enterprise. Innovation is defined as the act, process or product that creates a new dimension of performance. This award recognizes the achievements of an individual or team whose innovation has successfully translated the research emanating from our laboratories into new products and/or technologies that can be used by the public at large.

Dr. Davis is developing advanced video surveillance systems that use computers equipped with video cameras to not only detect the presence of people and track them, but also to identify their activities. The research has broad implications for Homeland Security as well as search and rescue, border patrol, law enforcement and many other types of military applications.

The systems combine video cameras with machine learning methods, enabling the computer to perform the kind of visual recognition that seems effortless for humans. Davis' work in investigating computer vision methods was recognized by the National Science Foundation with the prestigious NSF Faculty Early Career Development (CAREER) Program award. Support for this research (past and present) has been provided by the National Science Foundation, U.S. Air Force, Los Alamos National Lab, U.S. Army Night Vision Laboratory, Intel, and Ohio Board of Regents. Additionally, in both 2005 and 2012, Professor Davis has also earned the College of Engineering's Lumley Research Award.

FACULTY AWARDS



Jihun Hamm has received a 2015 Google Faculty Research Award, with a proposal titled Privacy-Preserving Machine Learning for Smart Devices which will explore effective privacy mechanisms for performing machine learning with a crowd of smart devices. The work will allow smart devices to share data and train learning algorithms while preserving the privacy of smart device users.

Google Research Awards are one-year awards structured as unrestricted gifts to universities to support the work of world-class full-time faculty members at top universities around the world.

Joel and Ruth Spira Excellence in Teaching Award. Lutron Electronics awarded to **Paul Sivilotti**, Associate Professor, Computer Science & Engineering.



NEW FACULTY JOINING COMPUTER SCIENCE AND ENGINEERING

In Fall 2016, Huan Sun will join the Department of Computer Science and Engineering at the Ohio State University (OSU) as an assistant professor. Huan received her Ph.D. in Computer Science from University of California at Santa Barbara in 2015. She is currently doing her post doctoral research at the University of Washington.

Huan's research interests lie in data mining, and machine learning with emphasis on text mining and understanding, network analysis, and human behavior understanding. Particularly, my research projects focus on: (1) Machine intelligent question answering (QA) based on knowledge bases and texts; (2) Human collaborative QA: expert behavior understanding and expertise mining; (3) Knowledge discovery from texts and networks.



THREE CSE FACULTY RECEIVE NSF CAREER AWARDS

Three CSE assistant professors, Brian Kulis, Arnab Nandi, and Anastasios Sidiropoulos received National Science Foundation Faculty Early CAREER Development (CAREER) Awards, one of the highest national awards junior faculty can achieve. Twenty-nine CSE faculty members have earned CAREER Awards since the program started in 1995.

The newest three CSE faculty members are working in three different but very important areas: machine learning, databases, and computer science theory.



Brian Kulis* is working in the area of artificial intelligence, focusing on machine learning. His CAREER project is “Rich and Scalable Optimization for Modern Bayesian Nonparametric Learning”. His

research focuses on data analysis and machine learning, and the goal is to develop new tools and algorithms for rich analysis of very large-scale data. As part of the project, he is developing algorithms for problems such as analyzing the evolution of communities in large networks, image classification, and automatic determination of topics in document collections.

Kulis says of the honor, “This award will provide support for several graduate students, and will make it possible for my group to design and analyze new methods for large-scale data analysis based on Bayesian nonparametric models. I am thankful to the National Science Foundation for their ongoing support of my research.”

* Brian joined Boston University in September 2015 as an assistant professor in Electrical and Computer Engineering department. We give him the best wishes.



Arnab Nandi is working in the area of databases focusing on data analytics and interactive query interfaces. His CAREER project is “Querying Beyond Keyboards: Gesture-driven Querying of

Databases”. Computing devices that use non-traditional methods such as gestures to interact with data are becoming more popular. While decades of research in databases have gone into making databases more performant, the focus has typically been on large-scale pipelines, and not end users. Research in human-computer interaction and visualization has recently been investigating data management concepts for user interfaces. In order to bridge this gap, this project takes a new approach towards enabling interactive and gestural querying of data.

An Ohio State College of Engineering faculty member since 2012, Nandi is also a founder of The STEAM Factory, a collaborative interdisciplinary research and public outreach initiative, and faculty director of Ohio State’s OHI/O Hackathon.



Anastasios (Tasos) Sidiropoulos is working in the area of theoretical computer science, focusing on computational geometry and graph theory. His CAREER project is “Geometric frontiers in algorithm design”.

The analysis of complex data sets is a task of increasing importance for science and engineering. Even though in many applications there is an abundance of raw inputs, extracting meaningful information can often be a major computational challenge. Over the recent years, geometric methods have become an indispensable tool towards this goal. The reason behind this development is the fact that a data set endowed with pairwise similarities can be naturally interpreted as a geometric space. This project aims at resolving some of the main problems inherent in the analysis of such geometric data sets, and thus enabling improved solutions for a variety of computational tasks.

“I am very grateful for all the support I have received from my mentors, colleagues, family, and friends, as well as the department, and OSU in general,” said Tasos.

ALUMNI'S GIFT FOR A STUDENT SCHOLARSHIP TO HONOR THEIR PROFESSOR

To honor Professor Steve Lai's mentorship and his accomplishments in both research and education in networking and security at Ohio State, his former students have established the Steve Lai Scholarship Fund in our department. Li-Feng Wu who received her Ph.D. in 1990 under the supervision of Professor Lai made an initial contribution to the scholarship with her husband Jen-Lung Chu. The scholarship has also received a matching fund from Microsoft where Both Li-feng and Jen-Lung are working. Several other Steve Lai's students have contributed to the endowed scholarship, including Ai Chen, now working at Shenzhen Institute of Advanced Technology in China, Santosh Kumar, now working at University of Memphis, and Tao-Heng Andy Yang, now working at Governance One Corporation in California. After the scholarship was endowed in the department, department colleagues and friends have made contributions. One scholarship has been awarded from the income of the Steve Lai Scholarship fund this year.



In addition to this scholarship, there are two other scholarship funds endowed by our former students in the department to recognize their professors including Mike Liu Scholarship Fund and B. Chandrasekaran and Sandra Mamrak Fellowship Fund. If you are interested in creating a new endowed fund in the department to honor any names who have made impact in your life, please contact the department chair.

LOSS OF A DEAR COLLEAGUE: ELIZABETH O'NEILL



The Department has learned of the loss of someone dear to the hearts of many current and former faculty, staff and graduate students. Ms. Elizabeth O'Neill (Petry), the former Graduate Admissions Coordinator and department Mother Hen, passed away on Thursday, March 19th, 2015. Survived by children, Temsen (Kathy), Larkin (Thuylynn), Newton and Allanda; grandchildren, Nathan (Shelly), Amanda, Rachel, Thomas, and Ellen; step great-grandchildren, Haley, Dillan, and Randy; brother, Jim (Judy) Petry; sister-in-law, Nancy Petry; aunt and uncle, Jewel and Frank Vanderpool; many nieces, nephews and cousins.

Elizabeth retired in 2007 after 32 years of service to the Ohio State University. She began her career in the Department of Chemistry. In 1980, Dr. David Hsiao, a faculty member and Editor-in-Chief of the ACM Transactions on Database Systems, wooed her to join the young, then named, Computer and Information Science Department. Her secretarial skills were quickly noticed and she also began working for Dr. Tse Feng, a faculty member and Editor-in-Chief of the IEEE Transactions on Computers. Word of her work ethic, talents, and pleasant personality obviously spread because in 1986 Elizabeth took a position as the Department of English chairperson's secretary. Dr. Mike Liu requested that she return to Computer Science as his secretary because he'd become the Editor-in-Chief of the IEEE Transactions on Computers. At this point, the Institute of Electrical and Electronics Engineers (IEEE) became aware of her talents and recognized her efforts awarding her the IEEE Appreciation Award for Outstanding Service (1988). During the early '90s Elizabeth took over the Graduate Secretary position in the Computer Science Department. In this position, Elizabeth was responsible for assisting graduate students with the various rules, regulations, and paperwork necessary for them to achieve their goal of graduating. In addition, she opened, sorted, and logged in literally thousands of graduate student applications to the department over the years; including the peak year of 2001 when 1,500 came in. Her diligence in this position earned her a CSE Award for her contributions to academia.

But Elizabeth was much more than "just a staff member" of CSE. She was a loyal and devoted friend to anyone who showed her the same. She was the unofficial mother hen to more than one of her grad students. With the nickname, "Grandma" she was a stand-in grandparent for more than a few of the babies and toddlers of faculty members and students alike.

2015 CSE SCHOLARSHIPS & AWARDS

2015 CSE SCHOLARSHIPS AND AWARDS TO STUDENTS, FACULTY AND STAFF MEMBERS

The department endowments donated from alumni and friends make it possible to offer many scholarships and awards to recognize the excellence and accomplishments of our students, faculty and staff members. The following scholarship funds and awards recognize many familiar names of faculty and alumni, which reflect the donations to the department. The department will host the 2016 Annual Awards Banquet in April 2016, where we again recognize many CSE scholarship and award recipients and the donors to the CSE Department.

SCHOLARSHIPS

Atharva Kaushik Scholarship

Tyler Edwin Rasor

Central Ohio Chapter of Association of Computing Machinery (ACM)

Austin Tayler Gilliam

Ernest William Leggett, Jr. Scholarship The Legget Family Award Endowment Fund

Frederick Christian Deiderich
Xuanlin Yang

Harris Corporation Scholarship

Kaitlyn Elizabeth Spehr

Matt J. Desch & Ann M. Murphy Award

Glen Lee Gainer
Johns Schneider Gresham

The O'Connell Family Award

Saad Asim

Ten-Hwang Lai Scholarship

Malcolm Sky Callis
Oscar Rubio

Wael Bahaa-El-Din Scholarship

Rubin Chen Zhang

Women in Computer Science Scholarship

Caitlin Mariah Talbot

Alumni Undergraduate Scholarships

Bryan Hall Arnold
Joseph Mackenzie Hayden
Seung Bum Jun
Zachary Scott Schroeder
Alexander Michael Vavra
Edward Zhu

DEPARTMENT AWARDS

B. Chandrasekaran & Sandra Mamrak Graduate Fellowship

Dr. Yiye Ruan
Yuxuan Wang

Mike Liu Graduate Fellowship Award

Venmugil Elango

Ten-Hwang Lai Fellowship Award

David Fuhry

Wael Bahaa-El-Din Scholarship on Performance Analysis of Computer Systems

Kaibo Wang

Outstanding Teaching Award

Dr. Jeremy Morris
Dr. P. (Saday) Sadayappan

Outstanding Service Award

Catrena Collins
Michelle Janney

Joel and Ruth Spira Excellence in Teaching Award from Lutron Electronics

Paul Sivilotti

THE GRACE HOPPER CELEBRATION

The Grace Hopper Celebration of Women in Computing is the world's largest conference for women in technology. Held October 2016 in Houston, Texas, the gathering brought together 12,000 women in the technology field, ranging from students studying Computer Science to professionals in the software industry.

Grace Hopper consisted of a three day long career fair, keynote speakers, seminars, workshops and plenty of networking and social activities. Some of the Keynote Speakers include– Sheryl Sandberg, COO of Facebook and founder Lean In, Susan Wojcicki, CEO of Youtube, Megan Smith, CTO of United State of America and many other female leaders in the technology fields. Many of us came back from the conference with multiple job and internship offers in hand but more importantly we came back with gained confidence and the inspiration to achieve our dreams and ambitions.

This year Ohio State's ACM-W chapter was able to send 12 girls to the conference with the support from the CSE department and the STEMM Gender Initiatives. The chapter felt that sending it's members to the conference was one of the best ways to demonstrate the mission of supporting women in the computing field.

The department wants to provide women with the opportunity and confidence to succeed in the field – whether that means finding career opportunities through career fair and networking sessions or personal and professional development through the workshops, speakers and seminars.



DISTINGUISHED PAPER AWARD AT OOPSLA 2015

Ohio State CSE students and faculty received a Distinguished Paper Award at the ACM SIGPLAN Conference on Object-Oriented Programming, Systems, Languages, and Applications (OOPSLA) in October 2015. OOPSLA is one of the top publication venues in the area of programming languages and software systems.

The award paper is led by CSE PhD candidate Swarnendu Biswas and co-authored by CSE PhD candidate Minjia Zhang, CSE professor Mike Bond, and Carnegie Mellon University (CMU) professor Brandon Lucia. Their paper, "Valor: Efficient, Software-Only Region Conflict Exceptions," demonstrates a novel approach called Valor for improving the reliability of software systems, by ensuring strong behavioral guarantees for all program executions -- even executions that contain a notoriously challenging kind of software bug called a data race. Valor demonstrates how to provide strong execution guarantees even in today's commodity systems, by using a software-only approach that is significantly more efficient than previously known techniques.

The Valor paper also received an OOPSLA Distinguished Artifact Award, honoring Swarnendu's implementation of Valor for being one of just two artifacts to exceed all expectations in the artifact evaluation process.

In addition, Swarnendu received first place in the ACM Student Research Competition (SRC) at OOPSLA, for his work on a new architecture that provides strong consistency and coherence guarantees. This exciting new work is collaborative with his advisor Mike and with Brandon at CMU. Ph.D. student Minjia Zhang received third place in the SRC for novel enforcement of a memory model based on snapshot isolation of synchronization-free regions, in work that that is collaborative with Swarnendu and Mike.

THIRD ANNUAL HACKATHON

Hackathon 2015 took place the weekend of November 14th and challenged students to ‘build something awesome’. This 24-hour event, where student and faculty from all over the Midwest worked together to code and create software that are designed to address ongoing issues in society.

The more than 500 attended participants worked in groups and individually throughout the weekend. This is record attendance dwarfed the first and second OHI/O Hackathons in 2013 and 2014, according to Matt Faluotico, a fourth-year in computer science and engineering and an organizer of the event.

This year there were more than 100 teams working on coding and designing at this year’s Hackathon. Mentors were on hand to assist students when they ran into technical problems and 60 judges decided the top ten teams. Teams were judged on creativity, real world application and how technically challenging the project was. Each of the top ten teams received prizes from cash to GoPro cameras and Apple watches. Prizes were awarded by various sponsors of the event, such as the Wexner Medical Center, Transitional Data Analytics, Esri and Fuse.

The weekend ended with presentations, in front of the judges, from all the teams on what they created in the 24 hours. A top team had the idea related to using quick response codes to fill out hospital forms while another created a game similar to “Missile Command” to teach people about how the body fights off viruses and disease. The winning team created an app called Valet, an event-based parking system where users can rent parking spaces from other people.

This year’s event was organized by student and university groups such as Buckeye Hackers, Open Source Club, Electronics Club, ACM-W, Mobile App Developers Club, CWDG, Engineering Career Services, College of Engineering, Department of Computer Science & Engineering, and University Libraries.

The two faculty advisors for this annual event are CSE professor Arnab Nandi and Library professor Meris Manderlnach. CSE Chair Xiaodong Zhang gave an opening speech in the Hackathon 2015.



FACULTY GRANTS



Alan Ritter, Assistant Professor

CRII: III: Learning to extract events from knowledge base revisions, National Science Foundation



Arnab Nandi, Assistant Professor

III: Small: Collaborative Research: Towards interactive data visualization management systems, National Science Foundation



Arnulfo Pérez, Kathy Malone and Chris Stewart

Arnulfo Pérez, College of Education and Human Ecology, and affiliated faculty in Latina/o Studies! Pérez won a \$1.2 million NSF Grant in September 2015 with Co-PIs Christopher Stewart and Kathy Malone for a STEM + Computing (STEM+C) Project that “seeks to integrate the use of computation approaches in K-12 STEM teaching and learning.



Chunya Peng, Assistant Professor

TWC:Small:Collaborative: Cellular network services in peril: A perspective on control-plane and data-plane design, National Science Foundation

NeTS:Small:Collaborative research: Configuration management for mobility support in cellular networks, National Science Foundation



Dhabaleswar K. (DK) Panda, Professor and Univeristy Distinguished Scholar

SI2-SSI: Collaborative research: A software infrastructure for MPI performance engineering: Integrating MVAPICH and TAU via the MPI tools interface, National Science Foundation

Coupling infiniband hardware features and network-to-accelerator remote data memory access (RDMA) in the message passing interface (MPI)

Research on high performance and scalable MPI over InfiniBand.



Gagan Agrawal, Professor

II-New: Research infrastructure for energy-aware high performance computing (HPC) and data analytics on heterogeneous systems, National Science Foundation

SHF:Small: Techniques and frameworks for exploiting recent SIMD architectural advances



Huamin Wang, Assisant Professor

SHF:Small: Techniques and frameworks for exploiting recent SIMD architectural advances, National Science Foundation



Kannan Srinivasan, Assistant Professor

EARS: Collaborative Research: Full Duplex for Cognitive Networks, National Science Foundation



DeLiang (Leon) Wang, Professor and Univeristy Distinguished Scholar

Deep neural networks for speech separation with application to robust speech recognition



Mikhail Belkin, Associate Professor

EAGER:The exploration of geometric and non-geometric structure in data, National Science Foundation



Atanas (Nasko) Rountev, Professor

SHF: Small: Control-flow and data-flow analysis of android software: Foundations and applications



Ness Shroff, Ohio Eminent Scholar

ARO: Advanced security games for cyber-physical systems
Distributed, agile and robust control of an intrinsically resilient overlay network

NeTS: Large: Collaborative research: Practical foundations for networking with many-antenna base stations, National Science Foundation



P. (Saday) Sadayappan, Professor

Whole-program adaptive error detection and mitigation with Gagan Agrawal

Domain specific language support for exascale with Gagan Agrawal and Louis-Noel Pouchet



Srinivasan Parthasarathy, Professor

Hazards SEES: Social and physical sensing enabled decision support for disaster management and response with Ethan Kubatko and Desheng Liu, National Science Foundation

EAGER: Practical graph sparsification on GPUs



Xiaodong Zhang, R.M. Critchfield Professor in Engineering

SHF: Medium: Collaborative research: Architectural and system support for building versatile memory systems, National Science Foundation



Yusu Wang, Associate Professor

Tamal Dey, Professor

AF:Small:Analyzing complex data with a topological lens with Tamal Dey and Roberto Facundo Facundo Memoil Techera, National Science Foundation



Department of Computer Science and Engineering

395 Dreese Labs
2015 Neil Avenue
Columbus, Ohio 43210
www.cse.ohio-state.edu alumni@cse.ohio-state.edu
phone: 614-292-5813 fax: 614-292-2911

Many Thanks to Our Alumni and Friends!

We appreciate the following alumni, faculty, staff and friends who directed their Ohio State gifts to the Computer Science and Engineering Department. Listed below are our benefactors over the past six months. These donations are making a difference. Private support can help us to attract outstanding students and promising young faculty.

Individuals

Catherine Agacinski
Gagan Agrawal
Gojko Babic
Wael Bahaa-El-Din
Ronald Beaton
Raviraj Bhide
Karl Bloss
James Cates
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William Triest
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Huamin Wang
David Wannemacher
Bruce Weide
Rephael Wenger
Brian Widdowson

Robert Wieczorek
Chris Woodruff
Rosi Wyan
Xiaodong Zhang

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