Faculty Name: Emmanuel Agu

Home Page: http://www.cs.wpi.edu/~emmanuel/

Research Group Memberships: MGRG, ISRG, PEDS

Graduate Courses Taught: CS 543, CS 563, CS 525M (Mobile Graphics)


Research Description:

In computer graphics, a major issue I focus on is mathematically modeling real world materials in nature in order to synthesize computer algorithms to render them. Examples of graphics effects that I have worked on in the past include diffraction in CD roms, interference in butterfly wings. Since mobile devices such as iPhones and cell phones have slower CPUs and battery powered, I also investigate how computer graphics algorithms can be optimized to reduce battery consumption on mobile devices and efficient display on small screens. Finally, I also work try to use specialized graphics processors (GPUs) to speed up compute-intensive algorithms such as radar processing algorithms and financial applications.

Current Graduate Research Students: Nicholas Deapen

Representative Publications:


Paul Timmins, Sean McCormick, Emmanuel Agu, and Craig Wills, Characteristics of Mobile Web Content, in Proc. HotWeb 2006 Workshop, Boston, MA

Cliff Lindsay and Emmanuel Agu, Spherical Harmonic Lighting of Wavelength-Dependent Phenomena, in Proc. Eurographics 2005
Faculty Name: Ryan Baker

Home Page: http://www.wpi.edu/~rsbaker

Research Group Memberships: AIRG, TRG, Science Assisments

Graduate Courses Taught: PSY 503 (Research Methods for the Learning Sciences), PSY504 (Meta-cognition, Motivation, and Affect), PSY505 (Advanced Methods and Analysis for the Learning Sciences)

Research Topics: educational data mining, data mining, machine learning, intelligent tutoring systems, gaming the system, affective computing, quantitative field observation, human-computer interaction, robust learning, cultural factors

Research Description:

My research is at the intersection of Educational Data Mining and Human-Computer Interaction. I develop and use methods for mining the data that comes out of the interactions between students and educational software, in order to better understand how students respond to educational software, and how these responses impact their learning. I study these issues within intelligent tutors and educational games. In recent years, my colleagues and I have developed automated detectors that make inferences in real-time about students’ motivational and meta-cognitive behavior, using data from students’ actions within educational software (no sensor, video, or audio data). We have in particular studied “gaming the system”, off-task behavior, carelessness, and the characteristics of robust learning. We use these models to make basic discoveries about human learning and learners, and their cognition, meta-cognition, motivation, and affect.

Current Graduate Research Students: Adam Goldstein, Adam Nakama

Representative Publications:


Faculty Name: Joseph Beck

Home page: http://www.wpi.edu/~josephbeck

Research Group Memberships: AIRG, TRG

Graduate Courses Taught: CS 534, CS 525 (Empirical Methods for Human Centered Computing), CS 525 (Graphical Models for Reasoning under Uncertainty)

Research Topics: educational data mining, machine learning and data mining, Bayesian inference, graphical modeling, causal modeling, empirical methods, evaluation, intelligent tutoring systems, human learning, assessment, AI

Research Description:

In a nutshell, my research is to do for our understanding of human learning what bioinformatics has done to our understanding of fine-grained biological processes. The enabling technologies for this endeavor, educational data mining, are more students using educational software, and computer networks becoming fast enough to send all student data back to a central repository. Having access to learning data from thousands of students across an entire school year is a powerful resource. The challenge is to develop computational approaches to make sense of the data, to raise new interesting questions, and to answer them. For example, when a student asks a computer for help on the current item, the help certainly helps him get through the current problem, but does it actually lead to longer-term learning? Answering this simple-sounding question is surprisingly subtle, and several naive models will not work. Therefore, I developed and trained a Dynamic Bayesian Network model that estimates both the short- and long-term effects of students asking for help. I work on a variety of problems related to human learning, and am also interested in using causal models more generally.

Current Graduate Research Students: Matt Bachmann, Yue Gong, Dovan Rai

Representative Publications:


Faculty Name: Dave Brown

Home Page: http://web.cs.wpi.edu/~dcb/

Research Group Memberships: AIRG, AIDG

Graduate Courses Taught: CS 538, CS 540

Research Topics: AI in Design, Computational Creativity, Design Rationale, Intelligent Interfaces, AI

Research Description:
Research interests include computational models of engineering design, and the applications of Artificial Intelligence to Engineering, Manufacturing, and interfaces.

Current Graduate Research Students: Jonathan Gibbons

Representative Publications:


Special Roles: Editor in Chief of the AI EDAM journal, Cambridge UP.
Faculty Name: Sonia Chernova

Home Page: http://www.wpi.edu/~soniac

Research Group Memberships: Robot Autonomy and Interactive Learning (RAIL), Human-Robot Interaction (HRI) reading group

Graduate Courses Taught: CS-595 Human-Robot Interaction

Research Topics: crowdsourcing, interactive robot learning, adjustable autonomy, multi-robot systems, human.robot interaction

Research Description:

My research interests lie in interactive robot learning, adjustable autonomy and human-robot interaction, and my work focuses on the development algorithms that enable robots to learn through social interaction with humans. I am particularly interested in active learning and the development of algorithms that enable learning agents to regulate their autonomy and request help from a human at critical timepoints. I am also interested in exploring online crowdsourcing as a means for training social robots, with the goal of developing robots capable of natural interaction and adaptation based on observation of human behavior.

Current Graduate Research Students: Bener Suay, Russell Toris, Adrian Boteanu

Representative Publications:


Sonia Chernova, Nicholas DePalma and Cynthia Breazeal. Crowdsourcing Human-Robot Interaction: Application from Virtual to Physical Worlds. In the IEEE International Symposium on Robot and Human Interactive Communication (Ro-Man), 2011.

Matthew E. Taylor, Halit Bener Suay and Sonia Chernova. Integrating Reinforcement Learning with Human Demonstrations of Varying Ability. In the International Conference on Autonomous Agents and Multiagent Systems (AAMAS), May 2011


Faculty Name: Mark Claypool

Home Page: http://www.cs.wpi.edu/~claypool/

Research Group Memberships: PEDS, CC

Graduate Courses Taught: CS 502, CS 529, CS 533

Research Topics: Multimedia Networks, Network Performance Analysis

Research Description:
Studying the effects of latency on interactive, Internet applications (such as streaming video or online games) is a core research problem my group tackles. The effects of other systems settings, such as frame rate, frame resolution and graphics settings, on Internet applications is also quite interesting. My general approach to computer science research is based upon a solid experimental research methodology: Observe, Hypothesize, Design, Experiment, Analyze and Report. My overall research interests include multimedia networking, congestion control, and network games.

Current Graduate Research Students: Feng Li, Zhe Zhou, Murad Kaplan, Sahel Mastoureshgh

Representative Publications:


Faculty Name: Dan Dougherty

Home Page: http://web.cs.wpi.edu/~dd/

Research Group Memberships: ALAS

Graduate Courses Taught: CS 5003, CS 503, CS 521, CS 559

Research Topics: Logic in Computer Science generally, with a focus on security, verification, and automated deduction.

Research Description:

The ALAS lab explores various problems related to logic, software engineering, software verification, security, and programming languages. We write formal models to make sense of computing problems, figure out how to describe complex system behaviors in useful ways as programs and for human end users, and build software tools that make programs more reliable and secure.

Current Graduate Research Students: Ken Breeman, Theophilos Giannakopoulos, Tim Nelson

Representative Publications:


Faculty Name: Mohamed Y. ELtabakh

Home Page: http://web.cs.wpi.edu/~meltabakh/MohammedELtabakh.html

Research Group Memberships: None yet

Graduate Courses Taught: None yet

Research Topics: Database Management Systems, Information Management, Query Processing and Optimization, Indexing Techniques, Scientific Data Management, Large-scale Data Analytics.

Research Description:

My research is in the broad area of Database Management Systems and Information Management. In particular, I work in the areas of query processing and optimization, indexing techniques, scientific data management, and large-scale data analytics. My recent work has explored extending Hadoop infrastructure to support complex operations such as joins and aggregations efficiently on large-scale datasets. Currently, I am exploring possible extensions to both database management systems and Hadoop framework to support scientific applications and health-care systems.

Current Graduate Research Students: None as of August, 2011

Representative Publications:


Faculty Name: Kathi Fisler

Home Page: http://www.cs.wpi.edu/~kfisler/

Research Group Memberships: ALAS

Graduate Courses Taught: CS 536

Research Topics: Formal verification, Software security, Programming Pedagogy

Research Description:

Modern computing systems are too complex for humans to comprehend in their entirety. This applies both to computing experts designing systems to manage critical infrastructure and to mainstream end-users configuring web-applications and ubiquitous computing devices. How do we create reliable computing artifacts from incorrect, incomplete and often inconsistent information from people? My research explores several corners of this question, including designing authoring tools for access-control and firewall policies, extracting formal system models from informal specifications, and teaching programming to novices.

Current Graduate Research Students: Guillaume Marceau, Tim Nelson, Salman Saghafi, Danny Yoo

Representative Publications:


Faculty Name: Mike Gennert

Home Page: http://web.cs.wpi.edu/~michaelg/

Research Group Memberships: ISRG

Graduate Courses Taught: CS/ECE 545, CS 549

Research Topics: Image Processing, Computer Vision, Robotics

Research Description:
My main research interests are Computer Vision / Image Processing and Robotics. In CV/IP, I have current projects in Medical Imaging. Medical Imaging has undergone tremendous advances in recent years, but many challenges remain to creating accurate images. For example, during an imaging procedure, patients are asked to lie perfectly still. Any motion can cause errors, even simple motions such as breathing and heartbeats. My students and I work on methods to correct for patient motion to produce the best possible images. Other research problems involve camera calibration for motion correction, motion tracking, and human models. In robotics, I am interested in developing novel types of robots, for example, to inspect trees for insect infestation and to bury power and telephone lines.

Current Graduate Research Students: Justin Barrett

Current Post-Doctoral Researcher: Cliff Lindsay

Representative Publications:


Special Roles: Director of Robotics Engineering, former CS Department Head
Faculty Name: Janice Gobert

Home page: http://www.wpi.edu/Academics/Depts/SSPS/People/jgl.html

Graduate Courses Taught: Learning Environments in Education, Foundations of the Learning Sciences

Research Topics: adaptive tutoring for science, skill acquisition, performance assessment via log files, learning with visualizations, learner characteristics, and epistemology.

Research Description:

Janice Gobert is an Associate Professor of Learning Sciences and Psychology in the Department of Social Sciences and Policy Studies and the Department of Computer Science. Cognitive Science. Her specialty is in technology-based with visualizations and simulations in scientific domains; her research areas are: adaptive tutoring for science, skill acquisition, performance assessment via log files, learning with visualizations, learner characteristics, and epistemology.

Current Graduate Students: Michael Sao Pedro, Ermal Toto, Juelaila Radzuddin, Adam Nakama, Matthew Bachmann, Cameron Betts, Michael Wixon

Representative Publications:


Faculty Name: Joshua Guttman

Home Page: http://web.cs.wpi.edu/~guttman/

Research Group Memberships: ALAS: Applied Logic and Security

Graduate Courses Taught: CS 521, 559

Research Topics: Information security and its foundations, Logical foundations of CS, Programming Languages.

Research Description:

My active research interests concern the foundations of trust and security in distributed systems. In particular, I am working on methods to design and verify security protocols; on logical techniques for reasoning about the behavior of secure systems; and on methods to design systems in which the security of the system survives despite the compromise of subsets of its components.

Current Graduate Research Students: Ken Breeman

Representative Publications:


Faculty Name: Neil Heffernan

Home Page: http://web.cs.wpi.edu/~nth/

Research Group Memberships: AIRG, TRG

Graduate Courses Taught: CS 525 (Intelligent Tutoring Systems)

Research Topics: Artificial Intelligence

Research Description:

The Artificial Intelligence work that I do mainly focuses on Educational Data Mining where we use techniques such as Bayesian networks and regression trees to better predict student data within Intelligent Tutoring Systems. I get very excited working with graduate students on projects related to ASSISTments. ASSISTments is a web-based tutoring system used by 7,000 students and about 100 teachers in Massachusetts and a few other states. Students that work on projects with ASSISTments will definitely have an impact on a large number of elementary and secondary school students. We do exciting work in software engineering and Educational Data Mining. We recently started work on an innovative new model that uses Bayesian Networks to better predict student learning.

Current Graduate Research Students: Zachary Pardos, Zachary Broderick, Yutao Wang, Dovon Rai, Adam Goldstein, Yue Gong, Paul Kehrer, Robert Martin, Joszef Patvarczki and Matthew Dailey.


Faculty Name: George Heineman

Home Page: http://www.cs.wpi.edu/~heineman

Research Group Memberships: SERG

Graduate Courses Taught: CS 509, CS 562, CS 525 (Software Composition)

Research Topics: Software Engineering, Component technology, Service Oriented Architecture

Research Description:
My research focuses on models and techniques to improve the ability to compose and decompose large software systems from modular units. Software component technology has evolved dramatically over the past decade and a number of viable component models (e.g., OSGi, EJB) have been developed and are currently in use within industry. In many ways, these technologies have only solved the syntactic problem of how to connect software units together. More challenging is the semantic composition of software units to ensure specific behaviors and functionalities. To address the fundamental issues in this space, I investigate a number of modular technologies including: Aspect oriented programming (AOP), Feature oriented programming (FOP), object oriented programming (OOP).

Current Graduate Research Students: None as of August, 2011

Representative Publications:

George Heineman, Gary Pollice, Stanley Selkow, Algorithms in a Nutshell, October 2008

Faculty Name: Micha Hofri

Home Page: http://www.cs.wpi.edu/~hofri

Research Group Memberships: THUG

Graduate Courses Taught: CS 5084, CS 584

Research Topics: Analysis of algorithms, probabilistic processes, applied analysis and combinatorics.

Research Description: My research includes the analysis of algorithms that can operate on data in storage, such as sorting and the generation of data structures, algorithms that control processes, such as communications protocols and managing wireless sensors networks, or methods of scheduling in operating systems. The main interest is the underlying processes, which are usually stochastic (probabilistic), and finding information about their properties. The tools are taken from probability, combinatorics (including complex analysis) and uses calculations (also with computer aids such as Maple), and simulations.

Current Graduate Research Students: None as of August, 2011

Representative Publications:


Faculty Name: Robert Kinicki

Home Page: http://web.cs.wpi.edu/~rek/

Research Group Memberships: PEDS, CC

Graduate Courses Taught: CS 513, CS 533, CS 577,

Research Topics: Wireless Sensor Networks, Wireless Networks, Multimedia Networks

Research Description:

Wireless sensor networks (WSNs) have emerged as a critical technology for the development of smart technologies and in continuous monitoring of environmental, medical, structural and surveillance applications. As a subset of wireless networks, WSNs must be designed to be power-aware to extend the network lifetime. Recent research efforts involve analysis and design of power-aware MAC protocols for WSNs. Wireless network research includes IEEE 802.11 networks, cellular network technologies and Zigbee. Our network performance analysis has focused on multimedia applications over last-mile wireless networks.

Current Graduate Research Students: Feng Li, Zhe Zhou

Representative Publications:


Faculty Name: Rob Lindeman

Home Page: http://web.cs.wpi.edu/~gogo/

Research Group Memberships: HIVE, ISRG, MGRG

Graduate Courses Taught: CS 525H (Human-Computer Interaction in Immersive Environments), CS 525V (Building Effective Virtual Worlds), CS 525U (3D User Interaction), CS 543

Research Topics: Virtual Reality, Game Development, 3D User Interaction, User Studies, Computer Graphics

Research Description:

Virtual environments are systems that represent a space using computer-generated or mediated stimuli. While this definition might seem broad, the defining differences between similar systems (e.g., desktop simulations) are a high level of immersion (i.e., "being there") combined with a tight coupling between user actions and changes to the environment. This reliance on effective user interaction, in all its forms, is the main goal of the WPI HIVE. We define virtual reality (VR) as fooling the senses into believing they are experiencing something that they are not actually experiencing. For our group, it is important to address all the senses. The vast majority of work that has been done in the field of VR has addressed the visual and auditory senses. We are interested in the remaining senses, haptic, olfactory, and gustatory, in addition to these.

Current Graduate Research Students: Paulo de Barros, Jia Wang, TJ Loughlin

Representative Publications:


Faculty Name: Charles Rich

Home Page: http://www.cs.wpi.edu/~rich

Research Group Memberships: Human-Robot Interaction, Artificial Intelligence

Graduate Courses Taught: CS 525 (Intelligent User Interfaces),

Research Topics: artificial intelligence, interactive media and game development, intelligent user interfaces, human robot interaction

Research Description:

When you collaborate with another human, your interaction consists not only of what you say (verbal behavior), but also how you move your body (nonverbal behavior). This intricately timed physical dance has tacit rules regarding, for example, where you look, when you nod your head, how you gesture with your hands, how you orient your body, and how long you wait for a response. A robot that does not correctly follow these nonverbal interaction rules will be difficult to work with.

We are using a specially constructed humanoid robot, named Melvin, to investigate these human-robot interaction rules. Melvin has a moveable head, arms and an expressive face, and is mounted on a two-wheeled mobile base. A speaker, microphone array and stereo camera let him talk, hear and see. Melvin is connected to several computers that run various kinds of artificial intelligence software, including programs for computer vision, natural language and speech understanding and generation, planning and dialogue modeling. Together, these programs support his totally autonomous interaction with humans.

Current Graduate Research Students: Aaron Holroyd, Brett Ponsler

Representative Publications:


Faculty Name: Carolina Ruiz

Home Page: http://web.cs.wpi.edu/~ruiz/

Research Group Memberships: KDDRG, AIRG

Graduate Courses Taught: CS 548, CS 539, CS 534, BCB 503 (Bioinfo & Biomedical Database Mining)

Research Topics: Data Mining, Machine Learning, Bioinformatics and Biomedicine, Knowledge Discovery in Databases

Research Description:
Professor Ruiz’s research focuses on algorithms for the discovery of patterns in data, with applications to several domains including bioinformatics and clinical medicine.

Current Graduate Research Students: Marin Kokona, Keith Pray, Francis Usher, Chiying Wang, Hao Wan.

Representative Publications:


Special Roles: Computer Science Department Graduate and Research Coordinator
Faculty Name: Elke Rundensteiner

Home Page: http://web.cs.wpi.edu/~rundenst

Research Groups: DSRG, XMDV

Courses Taught: CS 542, CS 561, CS 509, CS 525s (Data Streams and Sensors)

Research Topics: Data and Information Management, Data-intensive Systems, Stream Analytics.

Research Description:

My research projects center around the development of scalable data management technology in support of advanced applications including business, engineering, and sciences. My current research projects include intelligent event analytics, scalable data stream processing engines, stream mining and discovery, visual information exploration, and medical process tracking. My event analytics research project focuses on the development of innovative event stream processing and analysis techniques with the purpose to extract actionable knowledge out of continuous streams of raw data. In a related project, we apply and extend this core event analytics technology over RFID data streams to track healthcare workers within a hospital setting to prevent the spread of infections. Projects in real-time visual stream mining and multi-route stream engine development explore cutting-edge stream processing infrastructures as new classes of database systems technology.

Current Graduate Research Students: Lei Cao, Chuan Lei, Xika Lin, Mo Liu, Hao Loi, Abhishek Mukherji, Yingmei Qi, Medhabi Ray, Karen Works, Di Yang.

Representative Publications:


D. Wang, E. Rundensteiner, and R. Ellison, Active Complex Event Processing, Very Large Database Systems (VLDB), Sept 2011.
Faculty Name: Stanley Selkow

Home Page: http://web.cs.wpi.edu/~sms/

Research Group Memberships: THUG

Graduate Courses Taught: CS 584, CS 503

Research Topics: Graph Theory, Algorithmics

Research Description:

Most of my research is in Graph Theory, and in particular in Extremal Graph Theory and in Ramsey Theory.

Current Graduate Research Student: Fei Song

Representative Publications:

A. Gyarfas, G. N. Sarkozy, A. Sebo, and S. Selkow, "Ramsey-type results for Gallai colorings", Journal of Graph Theory, 2009

George Heineman, Gary Pollice and Stanley Selkow, Algorithms in a Nutshell, O'Reilly, 2008

Faculty Name: Craig Shue

Home Page: http://web.cs.wpi.edu/~cshue

Research Group Memberships: None yet

Graduate Courses Taught: None yet

Research Topics: computer networking, security, cloud computing, distributed systems, operating systems

Research Description:

My main research interests lie in the intersection of computer networking and security. My latest work has been in preventing online attacks, such as phishing and SQL injection attacks, using network-based approaches. I have also performed Internet measurement studies to examine how Web and DNS servers are provisioned and what vulnerabilities may result. I am particularly interested in studying network and security topics that are likely to make a substantial contribution to the lives of typical Internet users.

Current Graduate Research Students: None as of August, 2011

Representative Publications:


Faculty Name: Candace L. Sidner

Home Page: http://www.cs.wpi.edu/~sidner

Research Group Memberships: Human-Robot Interaction, Artificial Intelligence

Research Topics: artificial intelligence, computational linguistics, intelligent user interfaces, human robot interaction, natural language processing

Research Description:

What should your robot do when it is not busy obeying your commands?

With the rapid drive of technology towards placing increasingly capable robots into human home, work and play environments, it is time to start asking this question. Obviously the answer depends a lot on what kind of robot we are talking about. For example, if it’s a turtle-like floor cleaning robot, it probably should wait silently out of sight until it’s time to clean the floor. But how about a humanoid household robot? According to some science fiction visions of the future, even such robots should stand silently at attention until commanded to do something.

Our answer is that a successful robot should spend its time building and maintaining long-term social relationships with the humans in its environment. Because humans are deeply and fundamentally social beings, they cannot help but expect a continuously present artificial being, especially if humanoid, to become part of their network of relationships. We are developing the underlying theory and software architecture to build relational agents (both robotic and virtual) for social support of older adults.

Current Graduate Students: Bahador Nooraei Beidokht, Will Coon, Aaron Holroyd, Mohammad Shayganfar (joint with Prof. Rich)

Representative Publications:


Faculty Name: Eduardo Torres-Jara

Home Page: http://web.cs.wpi.edu/~etorresj

Research Group Memberships: Robot Autonomy and Interactive Learning (RAIL)

Graduate Courses Taught: None yet!

Research Topics: Artificial Intelligence, biological inspired robots, robotics manipulation, mobile (flying, swimming, and walking) robots, microfabrication, compliant actuation, sensing (vision, sound, tactile, etc.), machine learning, and control

Research Description:
I joined the faculty at WPI in the fall of 2010. My research interest is in advancing the field of robotics by creating a biomimetic framework where robots can safely come in contact with their environment and interact with it through a large number of sensors to extract relevant information to perform a task. Many challenges are faced to implement this kind of robots. For instance, new types of actuators, sensors, architectures, models and controls needed to be developed. My approach is addressing as many of these areas as needed to build functional robots. These approach was successfully tested in the area of robotic manipulation.

Current Graduate Research Students: Looking for graduate students to join my research group.

Representative Publications:


Faculty Name: Matthew Ward

Home Page: http://web.cs.wpi.edu/~matt

Research Groups: ISRG, Xmdv

Courses Taught: CS 543, CS 563, CS 549, CS 525D (Data Visualization)

Research Topics: data and information visualization, visual analytics

Research Description:
I am interested in the graphical representation and interactive exploration and analysis of virtually any kind of data and information. You could call this visual data mining - you design mappings from the data fields to graphical entities and attributes, and then using interactions to navigate the data space, filter out uninteresting things, and drill down to the details. Our current research focuses on two major problems. The first is the visual analysis of continuously arriving (streaming) data, which is becoming common in an increasing number of application domains. Some of the challenges include identifying interesting patterns on the fly and shedding older data in a way that preserves the most interesting features. The second is the visual representation and management of discoveries made during the analysis process, either via computational or interactive visual means. Thus, one could refine or filter similar patterns or discoveries made via different processes, or organize the discoveries in a sequence that can be used to validate or refute a hypothesis.

Current Graduate Research Students: Zaixian Xie, Zhenyu Guo, Kaiyu Zhao

Representative Publications:


Special Role: Director, Bioinformatics and Computational Biology Program
Faculty Name: Craig Wills

Home Page: http://www.cs.wpi.edu/~cew

Research Group Memberships: PEDS, CC

Graduate Courses Taught: CS 502, CS 513, CS 535

Research Topics: Web Privacy, Internet Performance, Network Measurement

Research Description:
My research involves systems and networks oriented work. I have three primary directions of current work. First is Web privacy where we seeks to measure and understand privacy leakage on the Web while investigating techniques to prevent it. Second is home network measurement where we examine home network performance by using JavaScript/Flash and Java applets to reduce impediments and increase incentives for helping a user better understand "How’s My Network”. Finally, is work on a ”utility provider” model that targets service-oriented computing. Our overriding goal is to gain understanding of basic principles in designing and building a global utility computing platform that would be highly responsive in resource reallocation, provide resource isolation to different applications, and support heterogeneous execution environments.

Current Graduate Research Students: Konstantin Naryshkin, Alan Ritacco, Wei Zhang

Representative Publications:


Special Role: Computer Science Department Head