Washington University in St. Louis

Computer Science & Engineering

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                  graduate/index.html

Faculty

Chair

Roch Guérin (https://engineering.wustl.edu/faculty/Roch-Guerin.html)
Harold B. and Adelaide G. Welge Professor of Computer Science
PhD, California Institute of Technology
Computer networks and communication systems

Professors

Sanjoy Baruah (https://engineering.wustl.edu/faculty/Sanjoy-Baruah.html)
PhD, University of Texas at Austin
Real-time and safety-critical system design, cyber-physical systems, scheduling theory, resource allocation and sharing in distributed computing environments

Aaron Bobick (https://engineering.wustl.edu/faculty/Aaron-Bobick.html)
James M. McKelvey Professor and Dean
PhD, Massachusetts Institute of Technology
Computer vision, graphics, human-robot collaboration

Michael R. Brent (https://engineering.wustl.edu/faculty/Michael-Brent.html)
Henry Edwin Sever Professor of Engineering
PhD, Massachusetts Institute of Technology
Systems biology, computational and experimental genomics, mathematical modeling, algorithms for computational biology, bioinformatics

Jeremy Buhler (https://engineering.wustl.edu/faculty/Jeremy-Buhler.html)
PhD, Washington University
Computational biology, genomics, algorithms for comparing and annotating large biosequences

Roger D. Chamberlain (https://engineering.wustl.edu/faculty/Roger-Chamberlain.html)
DSc, Washington University
Computer engineering, parallel computation, computer architecture, multiprocessor systems

Yixin Chen (https://engineering.wustl.edu/faculty/Yixin-Chen.html)
PhD, University of Illinois at Urbana-Champaign
Mathematical optimization, artificial intelligence, planning and scheduling, data mining, learning data warehousing, operations research, data security

Patrick Crowley (https://engineering.wustl.edu/faculty/Patrick-Crowley.html)
PhD, University of Washington
Computer and network systems, network security

Ron K. Cytron (https://engineering.wustl.edu/faculty/Ron-Cytron.html)
PhD, University of Illinois at Urbana-Champaign
Programming languages, middleware, real-time systems

Christopher D. Gill (https://engineering.wustl.edu/faculty/Christopher-Gill.html)
DSc, Washington University
Parallel and distributed real-time embedded systems, cyber-physical systems, concurrency platforms and middleware, formal models and analysis of concurrency and timing

Raj Jain (https://engineering.wustl.edu/faculty/Raj-Jain.html)
Barbara J. & Jerome R. Cox Jr. Professor of Computer Science
PhD, Harvard University
Network security, blockchains, medical systems security, industrial systems security, wireless networks, unmanned aircraft systems, internet of things, telecommunications networks, traffic management

Tao Ju (https://engineering.wustl.edu/faculty/Tao-Ju.html)
PhD, Rice University
Computer graphics, visualization, mesh processing, medical imaging and modeling

Chenyang Lu (https://engineering.wustl.edu/faculty/Chenyang-Lu.html)
Fullgraf Professor in the Department of Computer Science & Engineering
PhD, University of Virginia
Internet of things, real-time, embedded, and cyber-physical systems, cloud and edge computing, wireless sensor networks

Neal Patwari (https://engineering.wustl.edu/faculty/Neal-Patwari.html)
PhD, University of Michigan
Application of statistical signal processing to wireless networks, and radio frequency signals

Weixiong Zhang (https://engineering.wustl.edu/faculty/Weixiong-Zhang.html)
PhD, University of California, Los Angeles
Computational biology, genomics, machine learning and data mining, and combinatorial optimization

Associate Professors

Kunal Agrawal (https://engineering.wustl.edu/faculty/Kunal-Agrawal.html)

PhD, Massachusetts Institute of Technology
Parallel computing, cyber-physical systems and sensing, theoretical computer science

Roman Garnett (https://engineering.wustl.edu/faculty/Roman-Garnett.html)

PhD, University of Oxford
Active learning (especially with atypical objectives), Bayesian optimization, and Bayesian nonparametric analysis

Brendan Juba (https://engineering.wustl.edu/faculty/Brendan-Juba.html)

PhD, Massachusetts Institute of Technology
Theoretical approaches to artificial intelligence founded on computational complexity theory and theoretical computer science more broadly construed

Caitlin Kelleher (https://engineering.wustl.edu/faculty/Caitlin-Kelleher.html)

Hugo F. & Ina Champ Urbauer Career Development Associate Professor

PhD, Carnegie Mellon University
Human-computer interaction, programming environments, and learning environments

I-Ting Angelina Lee (https://engineering.wustl.edu/faculty/I-Ting-Angelina-Lee.html)

PhD, Massachusetts Institute of Technology
Designing linguistics for parallel programming, developing runtime system support for multi-threaded software, and building novel mechanisms in operating systems and hardware to efficiently support parallel abstractions

William D. Richard (https://engineering.wustl.edu/faculty/William-Richard.html)

PhD, University of Missouri-Rolla
Ultrasonic imaging, medical instrumentation, computer engineering

Yevgeniy Vorobeychik (https://engineering.wustl.edu/faculty/Yevgeniy-Vorobeychik.html)

PhD, University of Michigan
Artificial intelligence, machine learning, computational economics, security and privacy, multi-agent systems

William Yeoh (https://engineering.wustl.edu/faculty/William-Yeoh.html)

PhD, University of Southern California
Artificial intelligence, multi-agent systems, distributed constraint optimization, planning and scheduling

Assistant Professors

Ayan Chakrabarti
PhD, Harvard University
Computer vision computational photography, machine learning

Chien-Ju Ho (https://engineering.wustl.edu/faculty/Chien-Ju-Ho.html)

PhD, University of California, Los Angeles
Design and analysis of human-in-the-loop systems, with techniques from machine learning, algorithmic economics, and online behavioral social science

Ulugbek Kamilov (https://engineering.wustl.edu/faculty/Ulugbek-Kamilov.html)

PhD, École Polytechnique Fédérale de Lausanne, Switzerland
Computational imaging, image and signal processing, machine learning and optimization

Alvitta Ottley (https://engineering.wustl.edu/faculty/Alvitta-Ottley.html)

PhD, Tufts University
Designing personalized and adaptive visualization systems, including information visualization, human-computer interaction, visual analytics, individual differences, personality, user modeling and adaptive interfaces

Netanel Raviv (https://engineering.wustl.edu/faculty/Netanel-Raviv.html)

PhD, Technion, Haifa, Israel
Mathematical tools for computation, privacy and machine learning

Ning Zhang (https://engineering.wustl.edu/faculty/Ning-Zhang.html)

PhD, Virginia Polytechnic Institute and State University
System security, software security

Teaching Professors

Bill Siever (https://engineering.wustl.edu/faculty/Bill-Siever.html)

PhD, Missouri University of Science and Technology
Computer architecture, organization, and embedded systems

Todd Sproull (https://engineering.wustl.edu/faculty/Todd-Sproull.html)

PhD, Washington University
Computer networking and mobile application development

Professor of the Practice

Dennis Cosgrove (https://engineering.wustl.edu/faculty/Dennis-Cosgrove.html)

BS, University of Virginia
Programming environments and parallel programming

Senior Lecturers

Steve Cole (https://engineering.wustl.edu/faculty/Steve-Cole.html)

PhD, Washington University in St. Louis
Parallel computing, accelerating streaming applications on GPUs

Marion Neumann (https://engineering.wustl.edu/faculty/Marion-Neumann.html)
PhD, University of Bonn, Germany
Machine learning with graphs; solving problems in agriculture and robotics

Jonathan Shidal (https://engineering.wustl.edu/faculty/Jonathan-Shidal.html)
PhD, Washington University
Computer architecture and memory management

Douglas Shook (https://engineering.wustl.edu/faculty/Doug-Shook.html)
MS, Washington University
Imaging sensor design, compiler design and optimization

Lecturers

Hila Ben Abraham
PhD, Washington University in St. Louis
Parallel computing, accelerating streaming applications on GPUs, computer and network security, and malware analysis

Brian Garnett (https://engineering.wustl.edu/faculty/Brian-Garnett.html)
PhD, Rutgers University
Discrete mathematics and probability, generally motivated by theoretical computer science

James Orr (https://engineering.wustl.edu/faculty/James-Orr.html)
PhD, Washington University
Real-time systems theory and implementation, cyber-physical systems, and operating systems

Senior Professor

Jonathan S. Turner (https://engineering.wustl.edu/faculty/Jon-Turner.html)
PhD, Northwestern University
Design and analysis of internet routers and switching systems, networking and communications, algorithms

Senior Faculty Emeritus

Jerome R. Cox Jr.
ScD, Massachusetts Institute of Technology
Computer system design, computer networking, biomedical computing

Professors Emeriti

Takayuki D. Kimura
PhD, University of Pennsylvania
Communication and computation, visual programming

Seymour V. Pollack
MS, Brooklyn Polytechnic Institute
Intellectual property, information systems