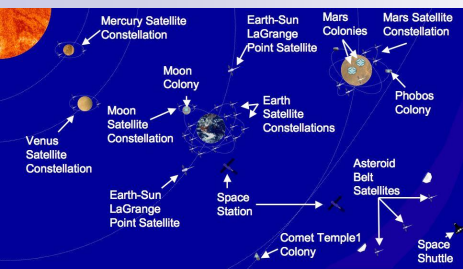
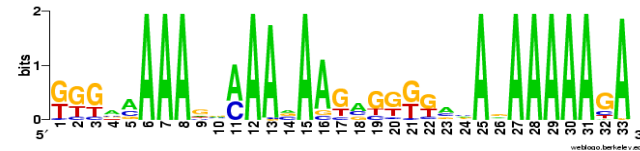
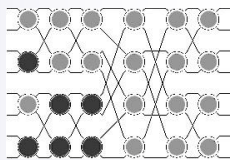
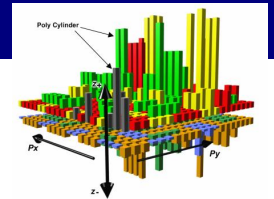
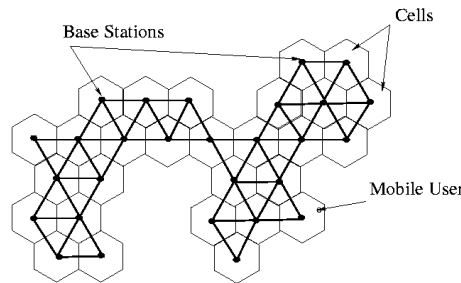
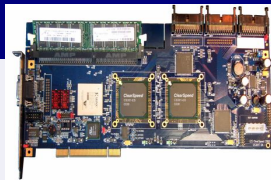
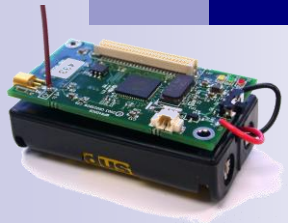


KSU Computer Science Department 2008 (First!) Graduate Alumni Reunion



Kent State University

■ 33,000 students

- 22,000 at Kent & 11,000 at 7 Regional Campuses
- 29,000 undergraduate & 4,000 graduate

■ 7 Colleges

- Business Administration, Architecture & Environmental Design, Nursing, Technology, Arts, Communication & Information
- Arts & Sciences
 - Anthropology, Biological Sciences, Chemical Physics, Chemistry, Computer Science, Geology, Mathematical Sciences, Physics
 - + 10 humanities & social science departments

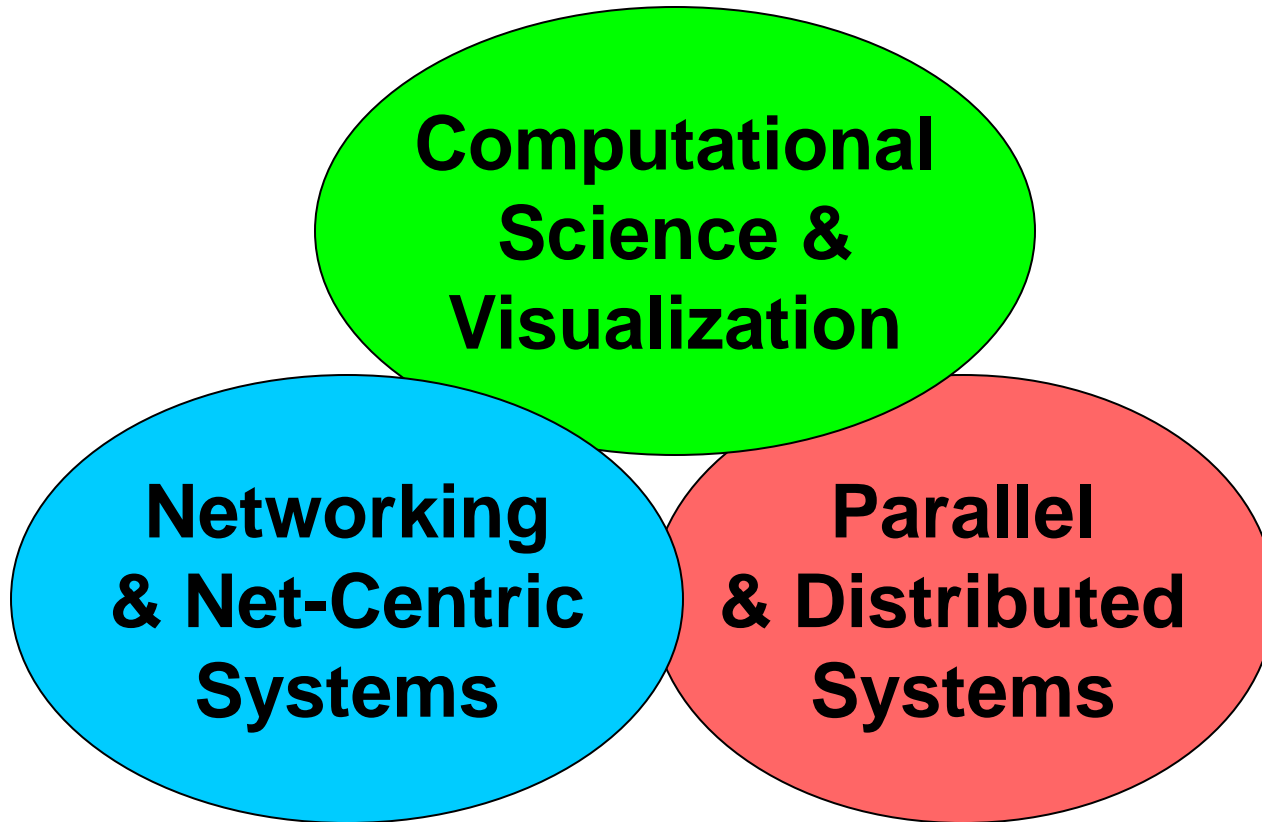
Computer Science Faculty & Staff

- **20 tenure-track faculty & 3 non-tenure-track faculty**
 - 12 Professors, 5 Associate Profs, 2 Assistant Profs
 - 1 Assistant Professor at Stark Campus
 - 1 NTT Industrial Associate Professor
 - 2 NTT Lecturers
- **3.2 staff members**
 - Administrative Secretary & Word Processing Specialist
 - Research Engineer II & III (each shared 60/40 w/ Math)
- **2 staff members (hired on extramural funds)**
 - Graduate Secretary (as Program Assistant 6)
 - Research Engineer II

Computer Science Students

- **~ 100 graduate students**
 - 57 Masters students
 - 41 PhD students
 - ~ 3 Masters and 2 PhD students per professor
- **~ 250 (declared) undergraduate majors**
 - 100 Freshmen
 - 48 Sophomores, 42 Juniors, 52 Seniors

KSU CS Research Interests



KSU CS Research Interests

**Computational
Science &
Visualization**

Biocomputing
& Bioinformatics

Image
Processing

Visualization
& Steering

Databases &
Data Mining

Cluster & Grid
Computing

Space
Networks

**Networking
& Net-Centric
Systems**

SW
Engr.

**Parallel
& Distributed
Systems**

Routing

Models &
Algorithms

Web-Based
Education

Wireless Sensor
Networks

Networks &
Architectures

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Education

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Networks &
Architectures

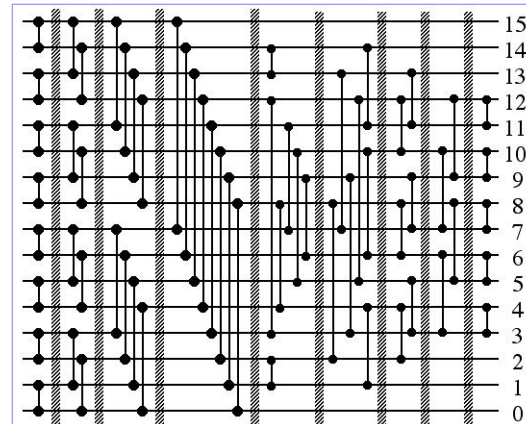
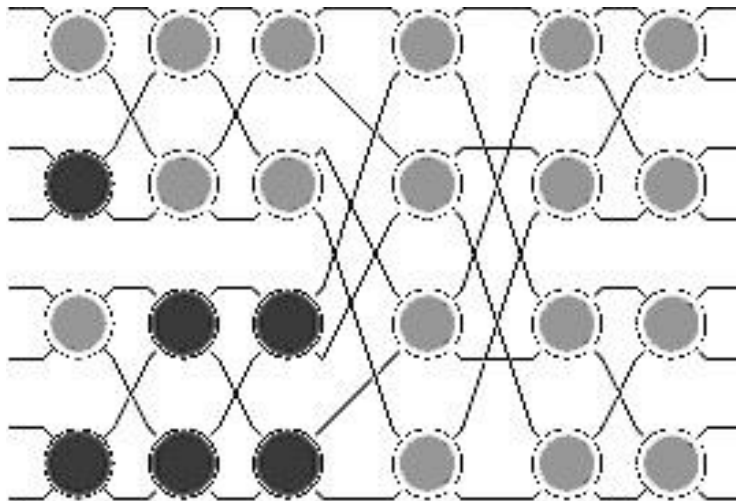
Kenneth E. Batchner

Professor

1964 Ph.D., University of Illinois



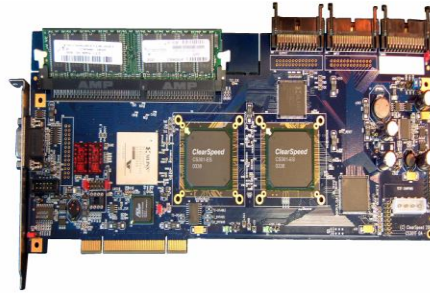
Research interests include...
parallel algorithms, parallel processors, parallelizing compilers, interconnection networks, and sorting networks



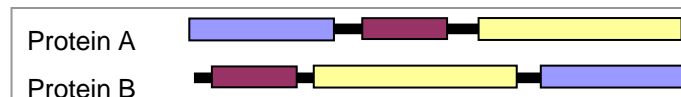
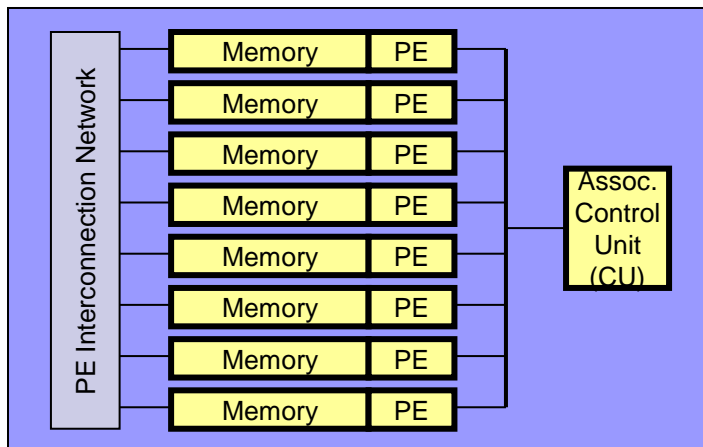
Johnnie W. Baker

Professor

1968 Ph.D., University of Texas at Austin



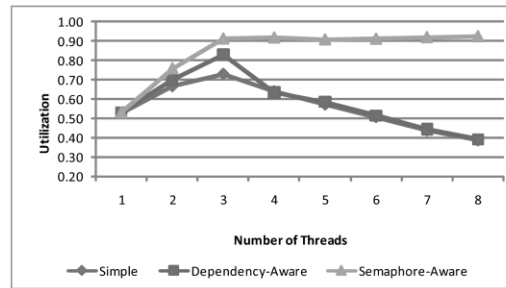
Research interests include...
 parallel computing, parallel computational models, parallel algorithms, associative SIMD and multi-SIMD computing, massively parallel architectures, SIMD real-time air traffic control, molecular similarity analysis, and structure-activity visualization in computational chemistry



Robert A. Walker

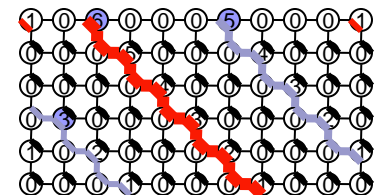
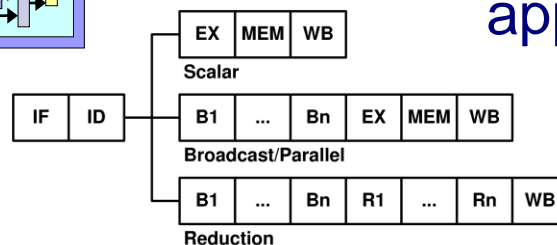
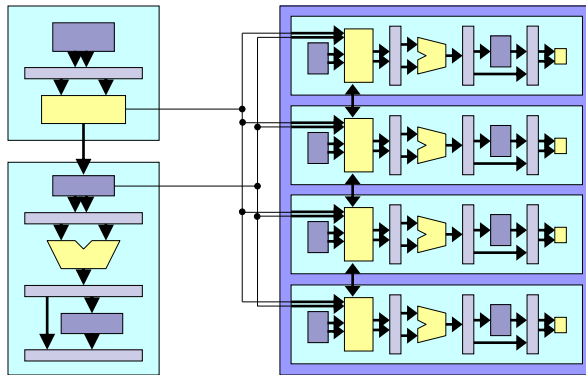
Professor & Chair

1988 Ph.D., Carnegie Mellon University



Research interests include...

novel architectures for embedded systems, in particular pipelined and multithreaded associative SIMD processing arrays on FPGAs, and hardware/software support to improve instruction cache performance for dedicated applications



KSU CS Research Interests

**Computational
Science &
Visualization**

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& Bioinformatics

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Processing

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& Steering

Databases &
Data Mining

Cluster & Grid
Computing

Space
Networks

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& Net-Centric
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SW
Engr.

**Parallel
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Systems**

Routing

Models &
Algorithms

Web-Based
Education

**Wireless Sensor
Networks**

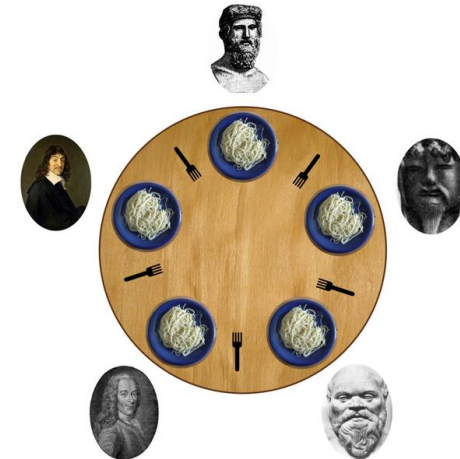
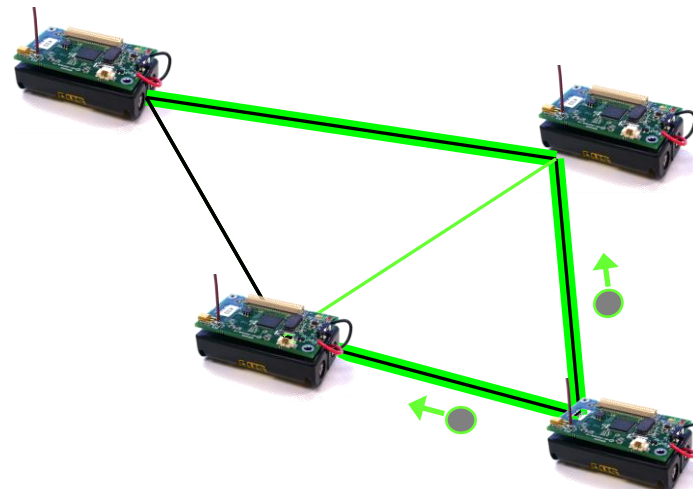
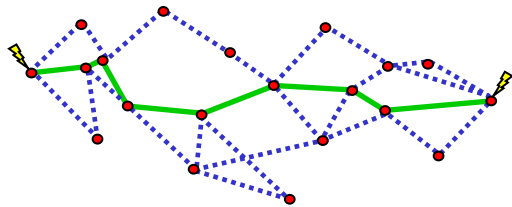
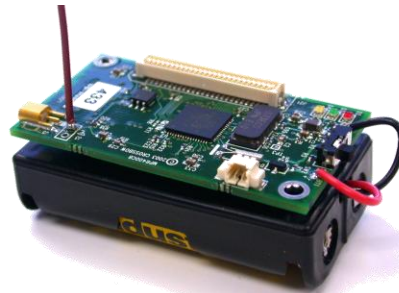
Networks &
Architectures

Mikhail Nesterenko

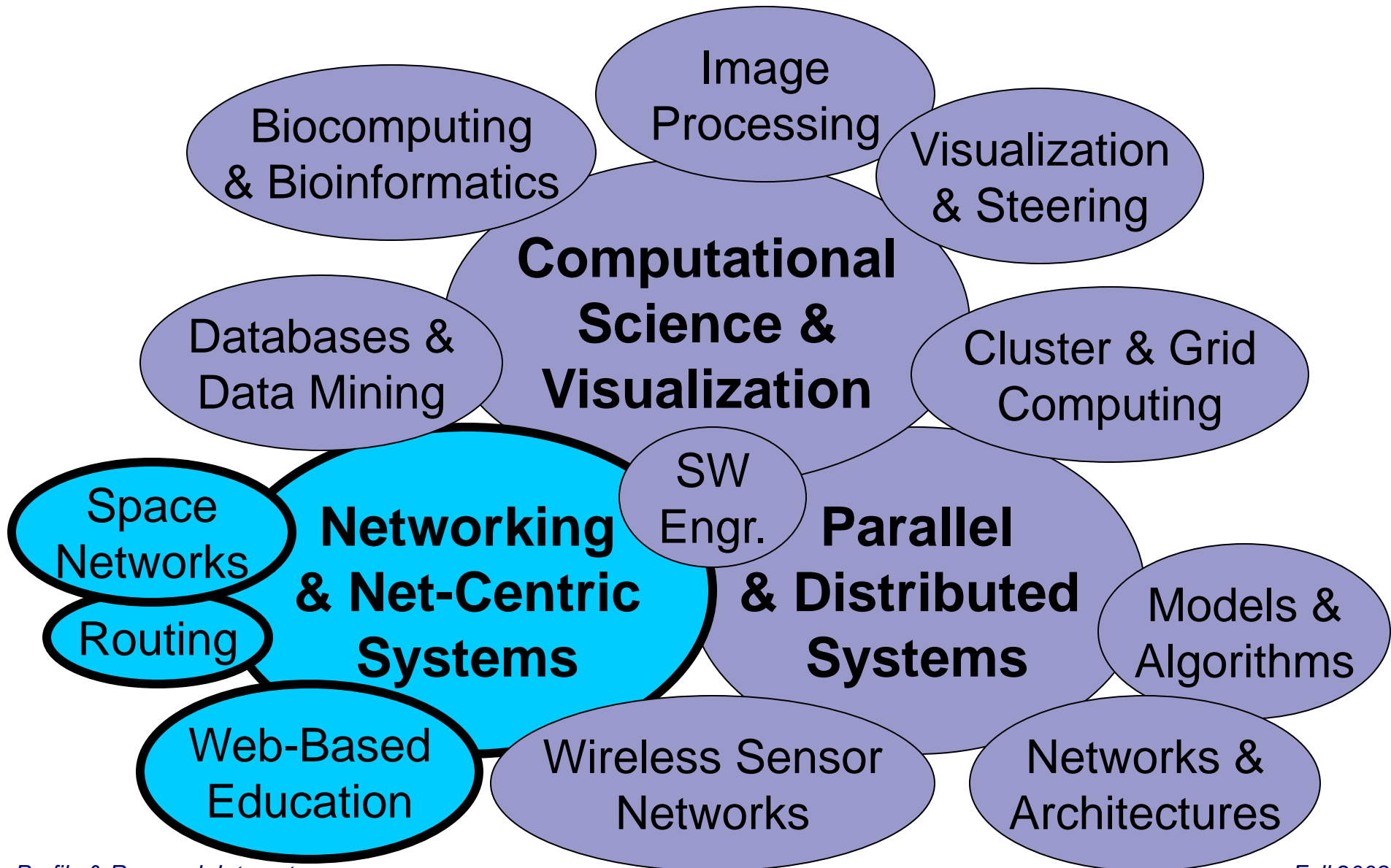
Associate Professor

1998 Ph.D., Kansas State University

Research interests include...
distributed algorithms,
distributed systems, and
computer networks



KSU CS Research Interests

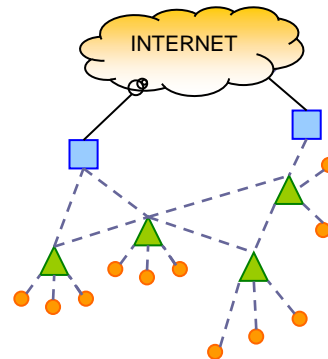
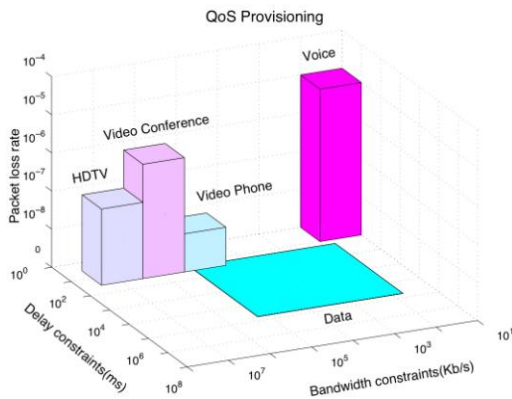
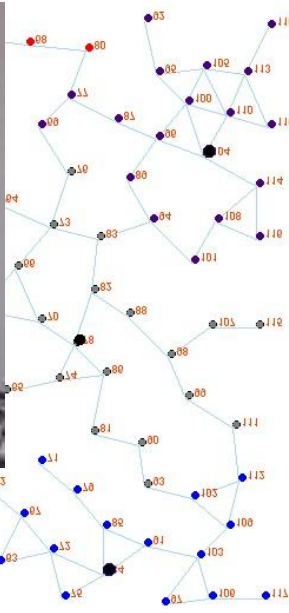


Hassan Peyravi

Professor

1985 Ph.D., University of Oklahoma

Research interests include... multiple access protocols for wireless and satellite communications, traffic management and congestion control, interconnection networks, and systems modeling and performance evaluations

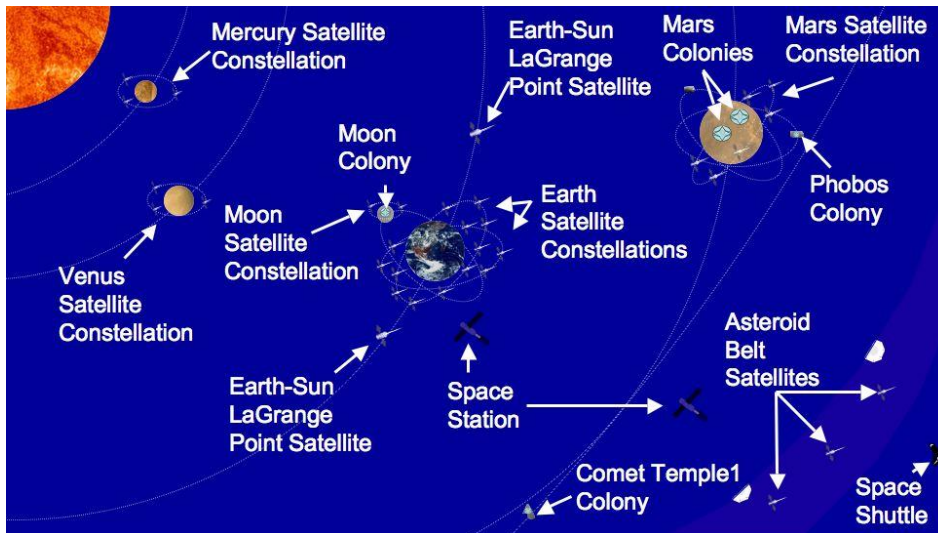
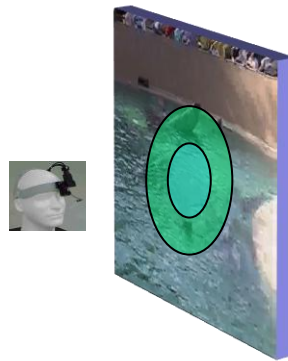


Javed I. Khan

Professor

1995 Ph.D., University of Hawaii at Moana

Research interests include...
networks, network based complex systems, space networking, peer-to-peer computing, high performance computation and communication, multimedia communication, image database, perceptual video, and associative information retrieval

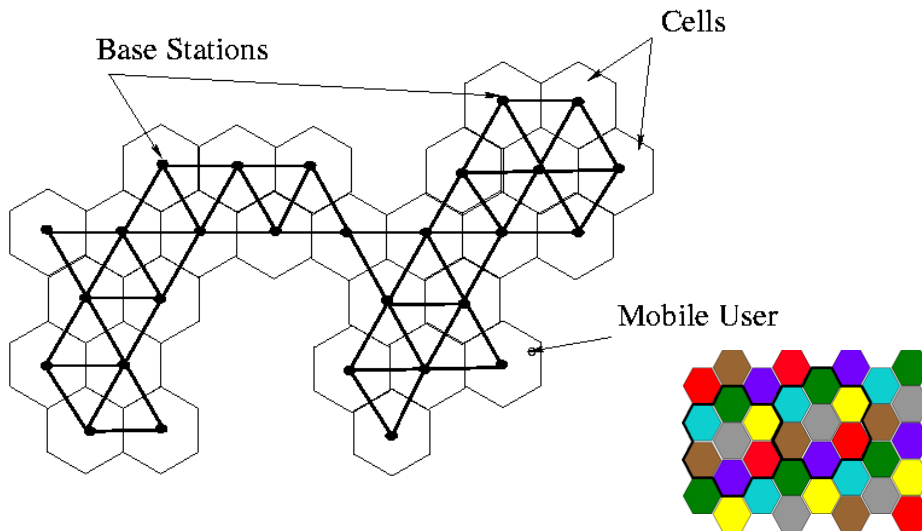
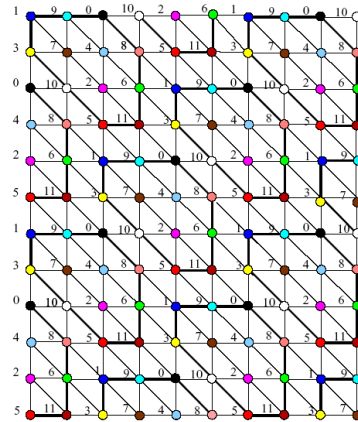


Feodor F. Dragan

Associate Professor

1990 Ph.D., Belorussian Academy of Sciences

Research interests include...
 design and analysis of geometric, network and graph algorithms,
 algorithmics of wireless ad hoc networks,
 computational geometry and biology, combinatorial optimization, geometry of discrete metric spaces, operations research, and data analysis

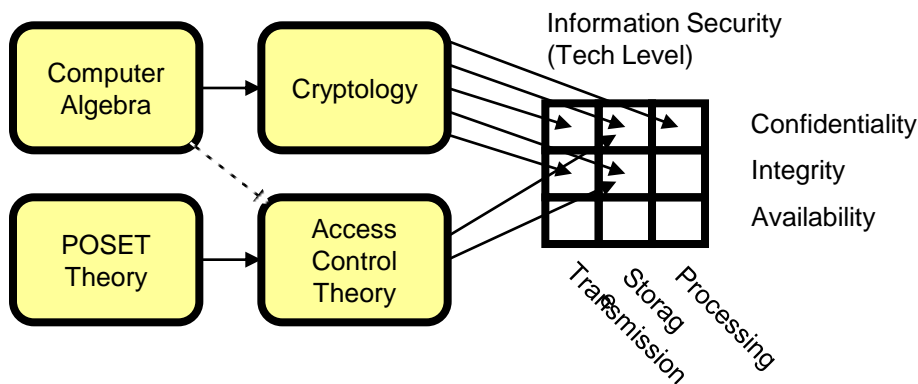


Michael Rothstein

Associate Professor

1976 Ph.D., University of Wisconsin

Research interests include...
 algorithms and systems for
 symbolic and algebraic
 computation, and
 information security
 specializing in access
 control theory



Paul S. Wang

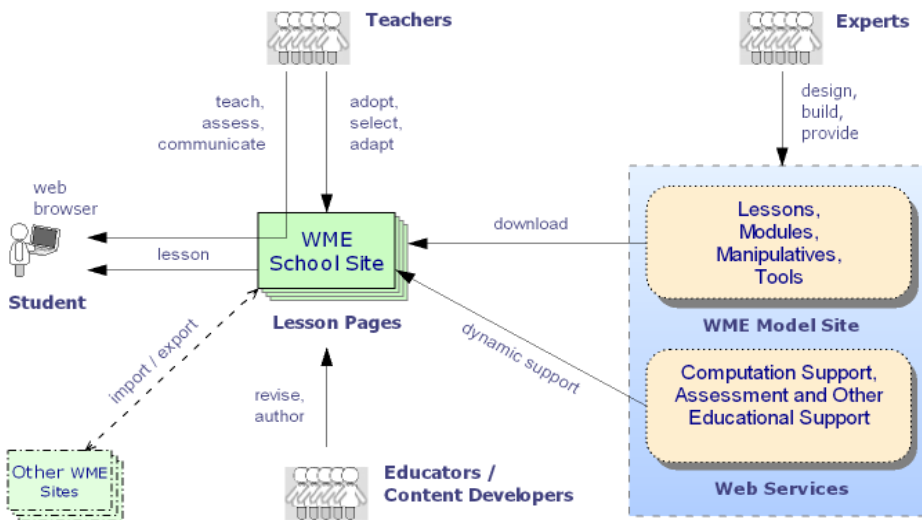


Professor

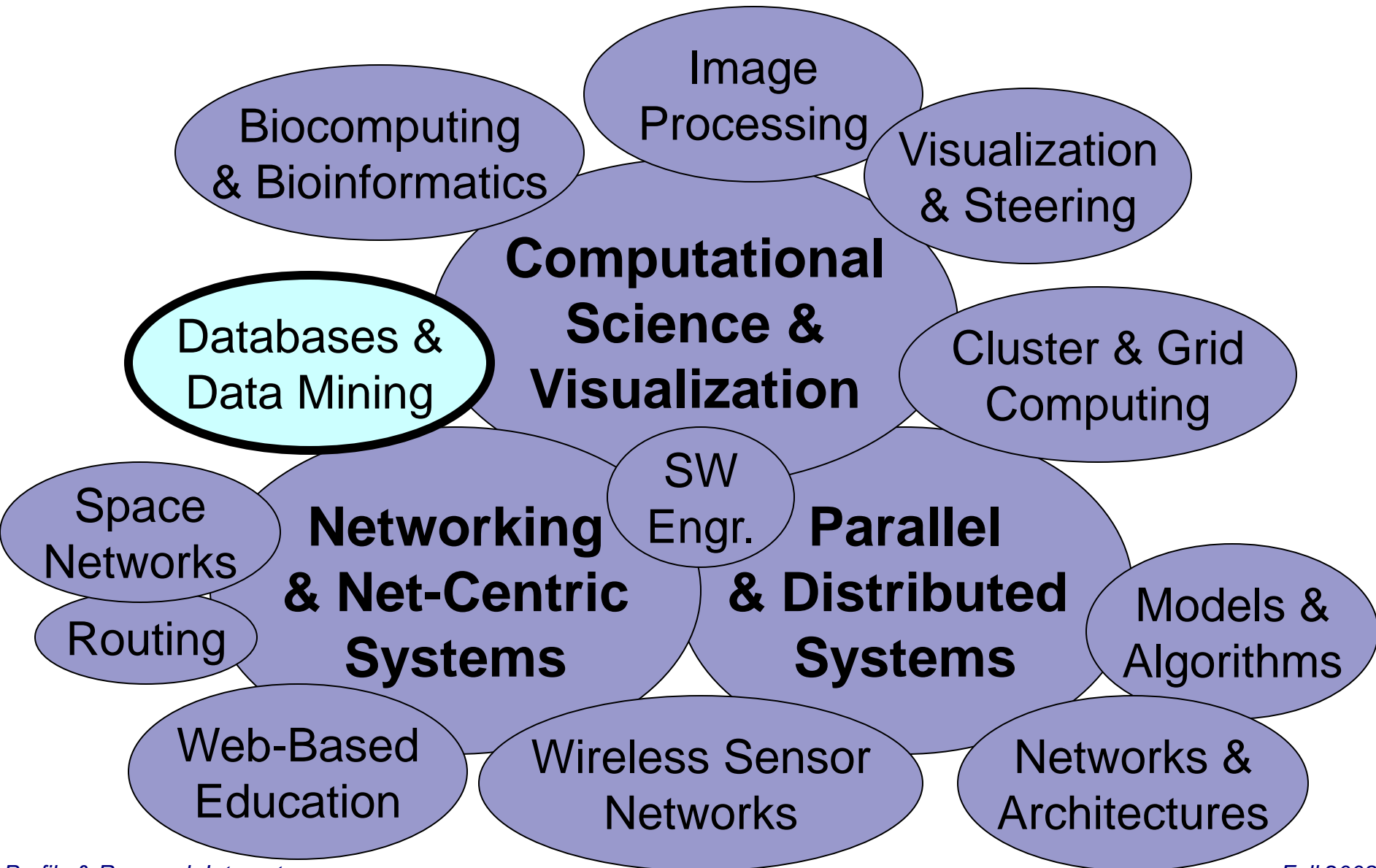
1971 Ph.D.,
Massachusetts Institute
of Technology

Research interests include...

symbolic computation,
polynomial algorithms,
distributed / parallel
computation, problem
solving environments,
internet-accessible
mathematical computation,
and Web-based
mathematics education



KSU CS Research Interests



Databases & Data Mining

Computational Science & Visualization

SW Engr.

Networking & Net-Centric Systems

Parallel & Distributed Systems

Models & Algorithms

Space Networks
Routing

Web-Based Education

Wireless Sensor Networks

Networks & Architectures

Biocomputing & Bioinformatics

Image Processing

Visualization & Steering

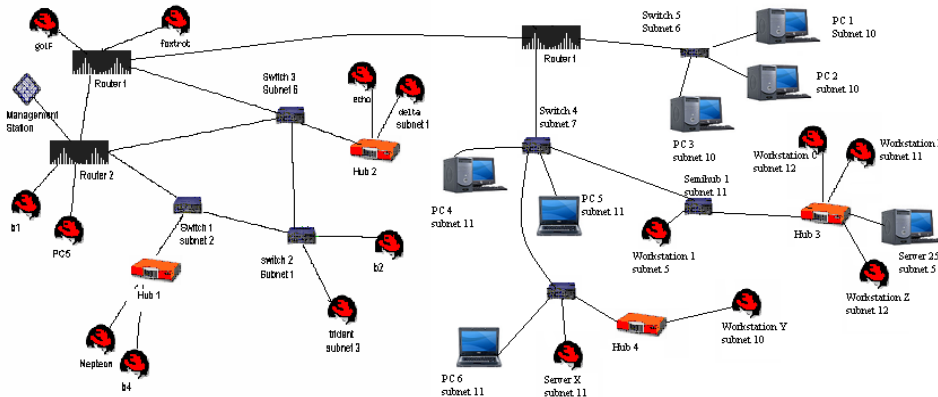
Cluster & Grid Computing

Yuri Breitbart

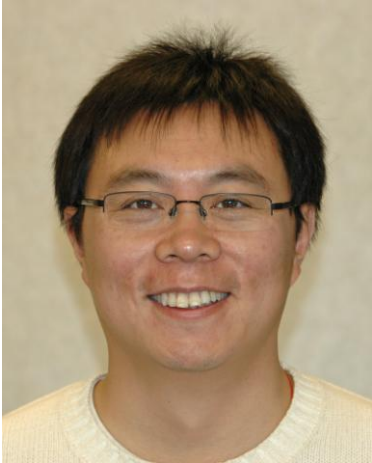
OBR Distinguished Professor

1973 D.Sc., Israel Technological Institute (Technion)

Research interests include... replicated and distributed databases, network management including network monitoring, network topology, data warehousing and multidatabases, data mining, and application of database and data mining technologies to medicine



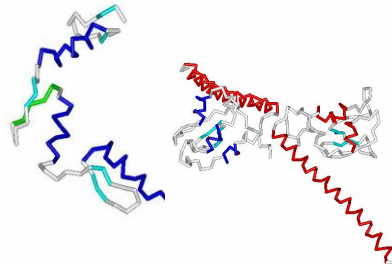
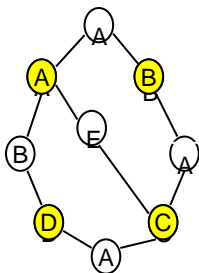
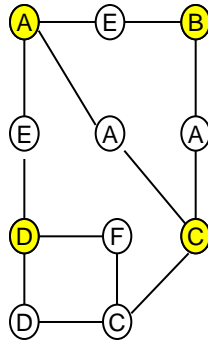
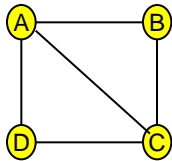
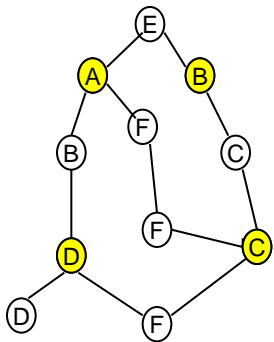
Ruoming Jin



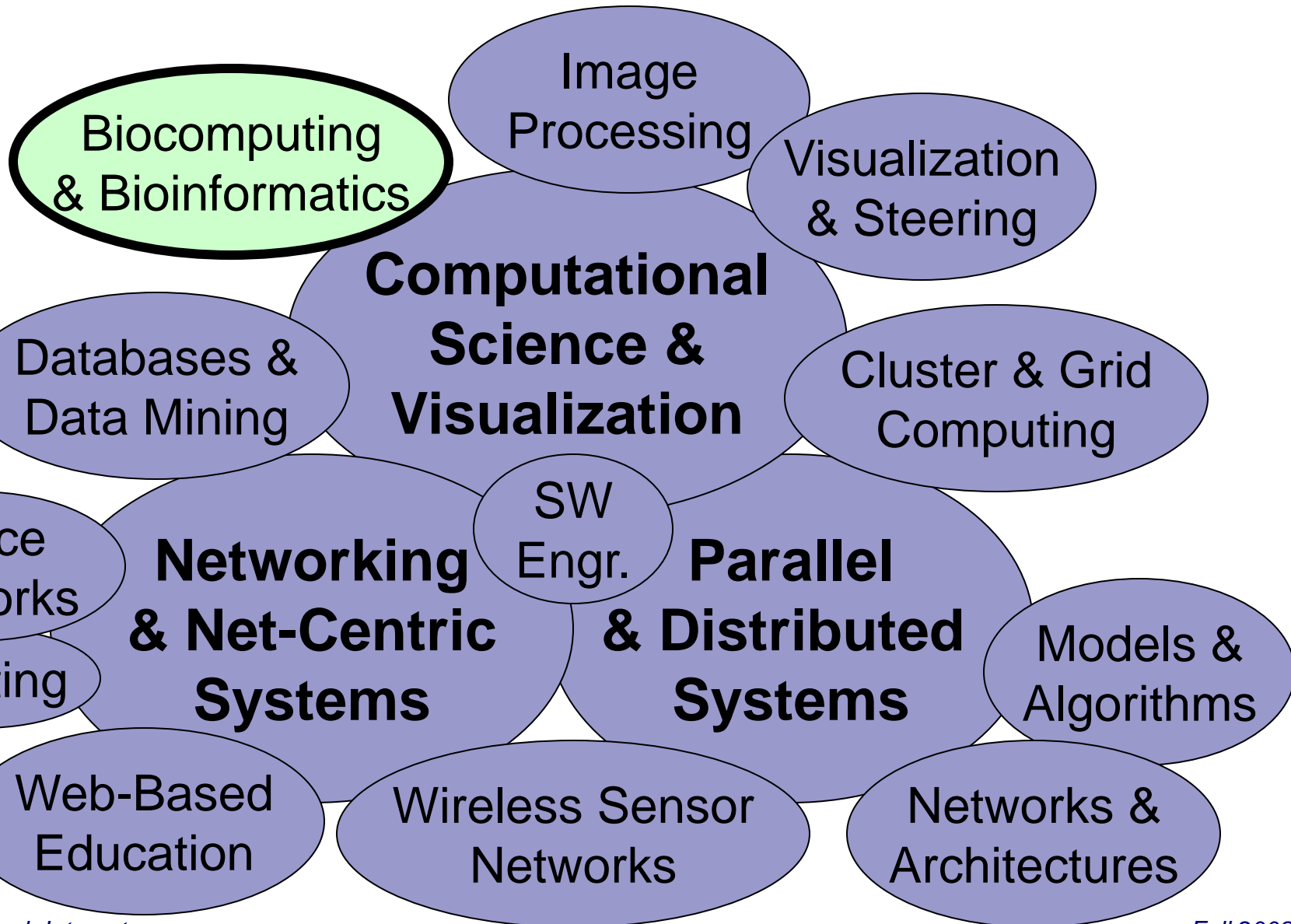
Assistant Professor

2005 Ph.D., Ohio State University

Research interests include...
system support and algorithm design for scalable data mining, data stream processing, massive graph mining, approximate query processing, bioinformatics, information integration for biological databases, and high performance computing



KSU CS Research Interests

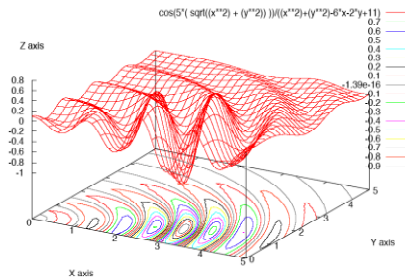


L. Gwenn Volkert

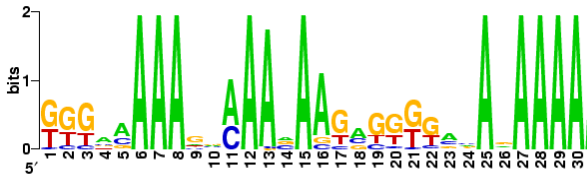
Associate Professor

2001 Ph.D., Wayne State University

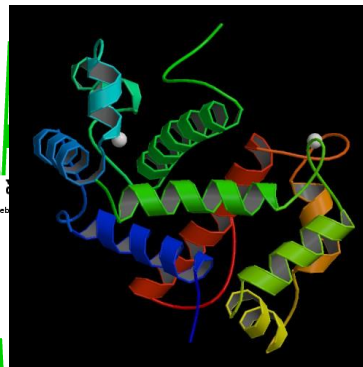
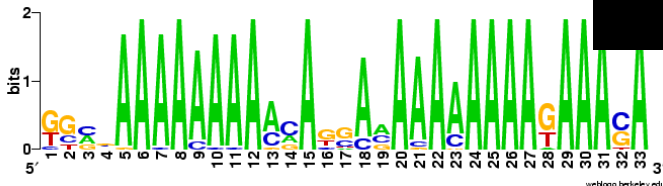
Research interests include...
 computational intelligence
 and machine learning
 approaches to problems in
 bioinformatics and
 computational biology,
 extending collective
 automata theory, and
 biological modeling and
 simulation; projects are
 interdisciplinary with life
 sciences research both
 locally and internationally



class 1



class 2

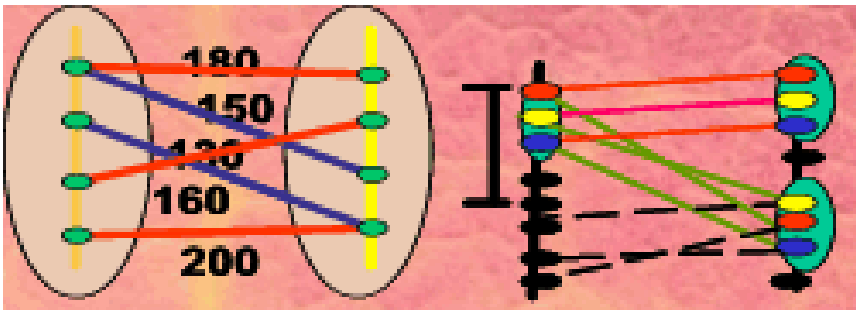
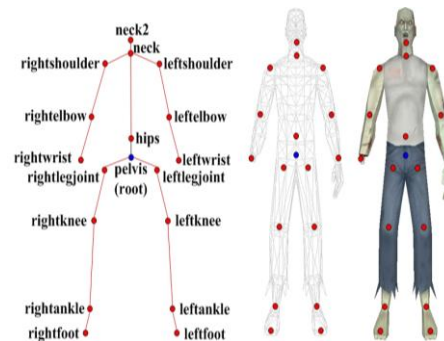


Arvind K. Bansal

Professor

1988 Ph.D., Case Western Reserve University

Research interests include...
 multimedia and Internet based computing languages and environments, human computer interaction, digital human system, image understanding systems, knowledge based systems, fault tolerant intelligent agents, bio-inspired intelligent computing, genomics and proteomics

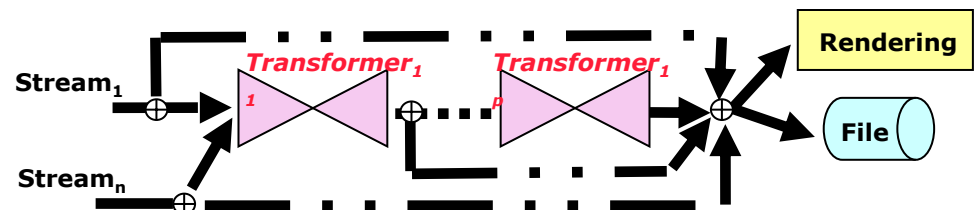
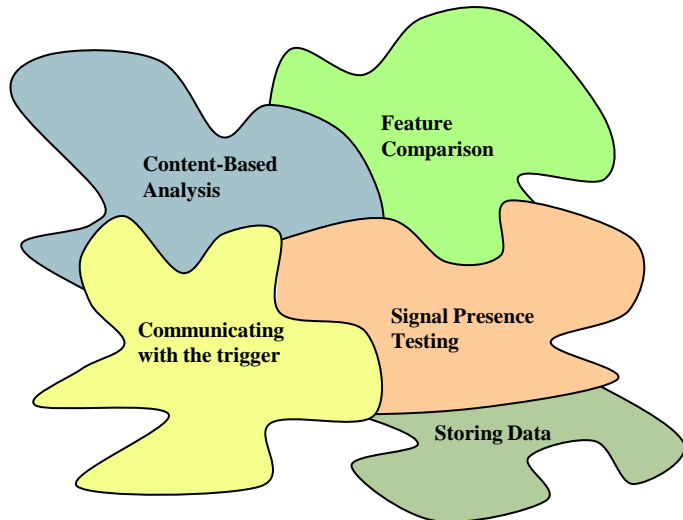
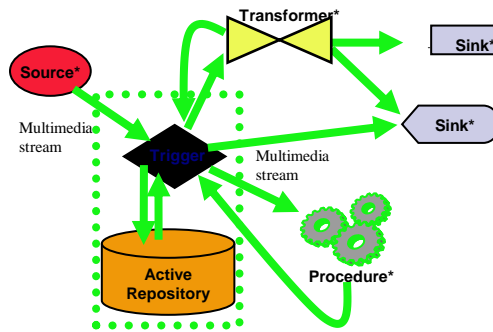


Angela Guercio

Assistant Professor
(Stark Campus)

2004 Ph.D., Kent State
University

Research interests include...
programming languages,
multimedia computing, and
web programming with
particular attention to
languages that support the
design and development of
reactive distributed multimedia
applications



KSU CS Research Interests

**Computational
Science &
Visualization**

Image
Processing

Visualization
& Steering

Biocomputing
& Bioinformatics

Databases &
Data Mining

Cluster & Grid
Computing

Space
Networks

**Networking
& Net-Centric
Systems**

SW
Engr.

**Parallel
& Distributed
Systems**

Routing

Models &
Algorithms

Web-Based
Education

Wireless Sensor
Networks

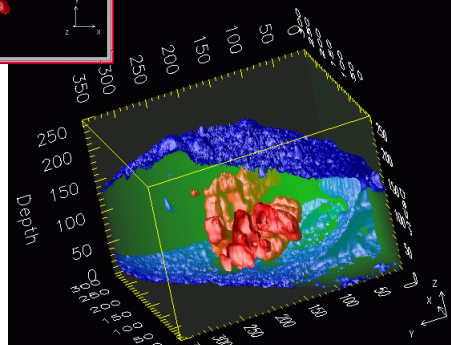
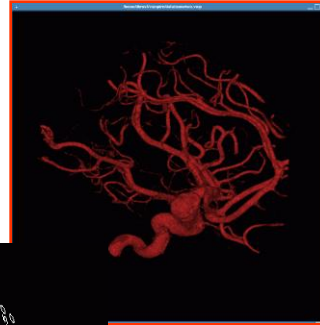
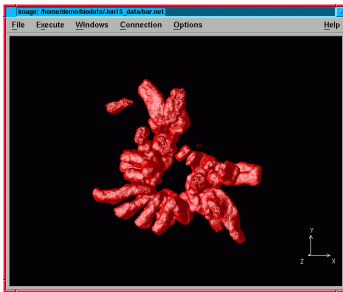
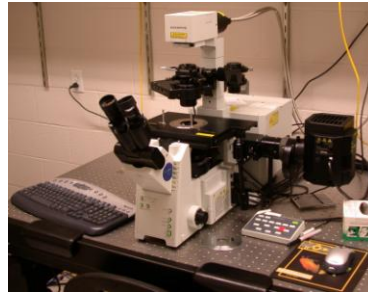
Networks &
Architectures

Arden Ruttan

Professor

1977 Ph.D., Kent State University

Research interests include...
computational science, bio-computing, liquid crystal modeling, visualization, parallel computing, numerical analysis, computational steering, cluster computing, highly ill-conditioned mathematical computations, and the parallel implementations of such problems

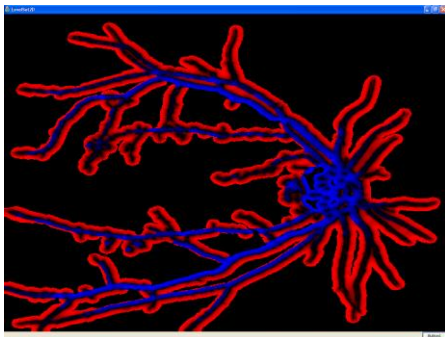
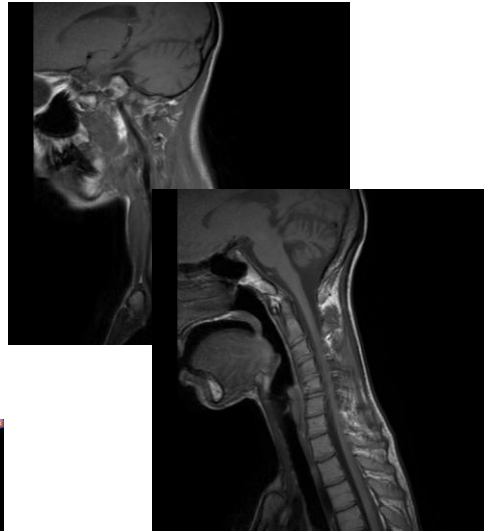


Cheng-Chang Lu

Professor

**1988 Ph.D., Southern
Methodist University**

Research interests include...
data compression, image
processing, computer
vision, medical image
registration and
segmentation, visual
communications, visual
information transmission,
and multimedia database
and mining



Ye Zhao



Assistant Professor

2006 Ph.D., Stony Brook University

Research interests include...
computer graphics and scientific visualization, natural phenomena modeling, physically based simulation and visualization, volume visualization, and general purpose computation using graphics hardware (GPGPU)

KSU CS Research Interests

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Science &
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Computing**

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Engr.

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Networks &
Architectures

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Algorithms

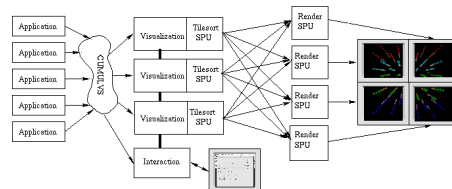
Paul A. Farrell

Professor

1983 Ph.D., Trinity College

Research interests include...

parallel and distributed computation, cluster and grid computing, computational steering, scientific visualization, high speed networking, numerical solution of singularly perturbed differential equations, and computational methods for liquid crystal problems, fluids and biology



KSU CS Research Interests

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& Bioinformatics

Cluster & Grid
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Databases &
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**SW
Engr.**

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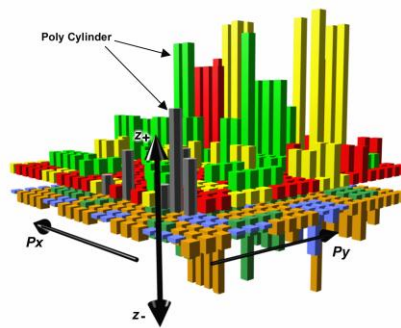
Wireless Sensor
Networks

Web-Based
Education

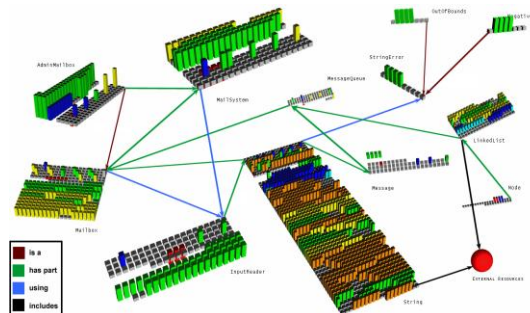
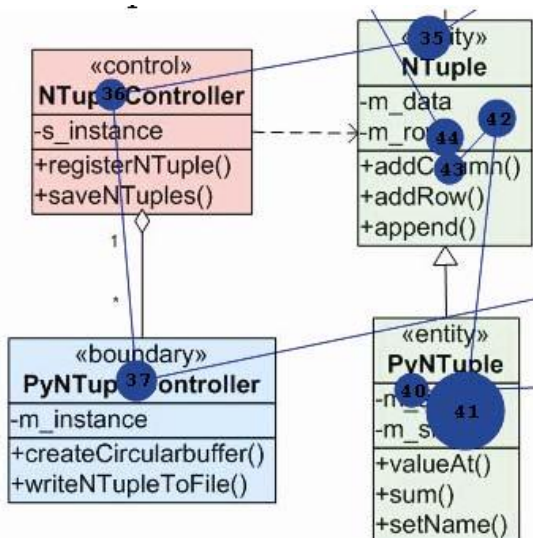
Jonathan I. Maletic

Associate Professor

1995 Ph.D., Wayne State University



Research interests include... software engineering and evolution, reverse engineering, program comprehension, static program analysis, software visualization, and maintenance tools and environments



Austin Melton

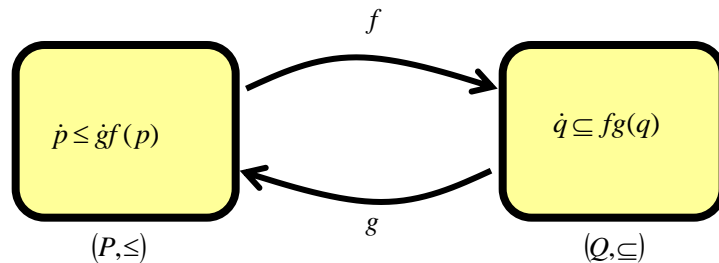


Professor

1980 Ph.D., Kansas State University

Research interests include...

measurement theory
 applied to software metrics,
 lattice theory with
 generalizations to category
 theory, programming
 semantics, ethical and
 social issues in the
 development and use of
 information technology, and
 mathematical pedagogy



f and g are order-preserving

f and g are quasi-inverses

$(f = fgf \text{ and } g = gfg)$

$\Rightarrow (f, P, Q, g)$ is an abstraction of a classical compiler correctness proof.