School of Electrical Engineering and Computer Science Program Bylaws
Washington State University
Administrative Home:
Last Revised – by Faculty _May 13, 2014_____
Faculty Senate Approval Date: _____

I. School of EECS Vision and Mission Statements

The overall vision and mission statements, which encompass both the graduate and undergraduate programs, for the School of Electrical Engineering and Computer Science are as follows.

Vision: To be a national leader providing experience-enhanced education and conducting interdisciplinary research in engineering and computing.
Educational Mission: Educate graduates for professional leadership, civic influence, and lifelong learning. Provide an education based on a theoretical, experimental, and ethical foundation and enhanced by opportunities for participation in research, internships, international studies, interdisciplinary programs, or programs in entrepreneurship.

Research Mission: Conduct research and develop technology to address present and future societal problems. Advance the state-of-the-art in areas incorporating technical disciplines from electrical engineering and computer science. Collaborate with researchers from other disciplines to address societal grand challenge problems.

Outreach Mission: Serve the community and the profession by participating in activities designed to improve and preserve the body of knowledge in engineering and computing. Participate in service that advances engineering and computing education. Transfer research results to communities, the nation, and the world to increase economic equity, quality of life, and ecological sustainability.

Objectives
In keeping with the School's overall vision and mission, the graduate program has the following objectives:
1. Attract, admit, and enroll students of the highest quality.
2. Provide a balanced student body, i.e., one that balances representation of women, U.S. citizens and permanent residents, and international students.
3. Have a graduate student body recognized by national awards.
4. Place graduating students in academic or industrial positions in relevant technical fields.
5. Maintain faculty research and graduate teaching of the highest caliber.

Degrees Offered at WSU Pullman and Urban Campuses

Doctor of Philosophy in Computer Science
Doctor of Philosophy in Electrical Engineering and Computer Engineering
Master of Science in Computer Engineering
Master of Science in Computer Science
Master of Science in Electrical Engineering

The doctoral and master's of science degrees in the School of Electrical Engineering and Computer Science are offered through the Pullman campus of Washington State University as approved and authorized by the Higher Education Coordinating Board (HECB) of Washington State. The campuses at Vancouver and Tri-Cities support this program but are not approved and authorized by the HECB to directly advertise and offer the degree as individual campuses.

II. Membership

Criteria for Graduate Faculty Membership in the EECS Graduate Program:

A. Graduate Faculty within the School of Electrical Engineering and Computer Science must have a PhD degree and be WSU tenured faculty, tenure track faculty, non-tenured track faculty, or adjunct faculty. WSU non-tenure track faculty, or WSU adjunct faculty, are subject to the limitations and definitions in this document. Approval of EECS GSC is required for non-tenured track faculty. All Graduate Faculty must be on the Graduate Faculty List, listed in Section IX of this document or subsequently approved as Graduate Faculty through the process outlined. Approved tenured and tenure track EECS Graduate Faculty at all regional campuses may participate equally in the EECS program as supporting site faculty with full program rights and responsibilities. Chair and Co-chair of a graduate student committee are required to be Graduate Faculty in EECS. As such they are entitled to act as chair, co-chair, or member of graduate student committees; teach graduate courses; supervise research; and act as a program director or committee member.

1. Disciplinary Expertise

   Graduate Faculty within EECS are expected to have a PhD or equivalent doctoral-level degree in a field related to EECS. In addition, they must have demonstrated disciplinary expertise in a field related to EECS, interest and experience in mentoring and teaching of graduate students in this field, and relevant professional accomplishments.

2. Active Research Appropriate to EECS

   EECS Graduate Faculty must be actively involved in research and graduate level teaching related to EECS as evidenced by recent external grant or contract support, related peer-reviewed publications within the last 5 years, graduate student mentoring within the last 5 years, teaching of relevant graduate level courses, or other relevant professional accomplishments.

3. Voting Rights

   All active members of the Graduate Faculty of Electrical Engineering and Computer Science are eligible to vote.

4. Non-Tenure Track Graduate Faculty

   a. Internal to WSU

      Non-tenure track Graduate Faculty internal to WSU include research, clinical, and affiliate faculty. These researchers are classified as WSU adjunct faculty but may function in the same roles as WSU tenured and tenure-track faculty. The non-tenure track faculty internal to WSU (research, clinical, affiliate, faculty) may be active EECS Graduate Faculty and entitled to act as co-chair or member of graduate student committees; teach graduate courses; and supervise research. When serving as co-chair of a student committee they must work with a tenured or tenure-track faculty member who is also an active member of the EECS Graduate Faculty.

   b. External to WSU

      Professionals who are not WSU faculty may be granted Graduate Faculty participation within EECS if they are first officially approved as adjunct faculty for WSU. Adjunct faculty who are approved as active EECS Graduate Faculty are entitled to act as a member of graduate student committees; teach graduate courses; and supervise research. They may not serve as student committee chair or co-chair.

5. External Individual Committee Members

   Individuals not officially participating as Graduate Faculty within EECS (for example, a faculty member from another program or university) may be approved to serve as a thesis/dissertation committee member for an individual student on a case-by-case basis. The committee chair for that student should forward the name of the desired committee member with a curriculum vitae to the EECS Graduate Studies Committee Chair. With approval of the EECS Graduate Studies Committee, the nomination is then forwarded to the Dean of the Graduate School for final approval.

B. Application for Membership

1. Initial Graduate Faculty within EECS are listed in Section IX of this document and have been approved by the EECS existing faculty, Chair of EECS Graduate Studies Committee, and Dean of the Graduate School.

2. Candidates for Graduate Faculty participation within EECS should be nominated by an existing EECS Graduate Faculty member or may self-nominate. The nomination should include a letter of nomination, and a curriculum vitae for the nominee. The EECS Graduate Studies Committee will circulate application materials to all active Graduate Faculty prior to

voting. Acceptance as Graduate Faculty requires a positive vote from a majority of faculty who respond to the vote.

3. In addition to a commitment to maintain the highest standards of mentoring for graduate students, anticipated contributions or qualifications for all successful Graduate Faculty applicants include one or more of the following:

    a. History of an active, funded research program that can plausibly be relied upon as the source of continuing support of an EECS graduate student.

    b. History of or willingness to participate as appropriate in administrative, teaching, and other functions of the EECS graduate program. This may include serving on the EECS Graduate Studies Committee, GSC administrative committees; GSC subcommittees; serving as a thesis or dissertation committee member or chair; or providing graduate level instruction.

    c. History of publication of peer-reviewed manuscripts in a discipline related to EECS

C. Continuation of Active Membership

1. Graduate Faculty appointments to EECS will be reviewed for continuation of active membership by the EECS Graduate Studies Committee every 3 years with one-third of the membership reviewed each year. They will be evaluated for contributions to graduate instruction, research, and teaching. Contributions to the EECS program shall be a requirement for continued active membership. Contribution may take the form of:

    a. Committee chair, co-chair or member for graduate students in EECS
    b. Teaching or co-teaching a graduate course in EECS
    c. Supervising research for graduate students in EECS
    d. Serving in the administrative, committee and subcommittee structure of EECS

2. Faculty who do not make any of the contributions as stated in C.1 above to the EECS program for three consecutive years will be designated as inactive Graduate Faculty. Inactive Graduate Faculty do not have voting rights. Initiation of any of these activities described in C.1 above will result in restoration of active Graduate Faculty designation.

D. Discontinuation of Membership

EECS Director can discontinue an individual Graduate Faculty Membership based on the faculty member's failure to satisfy the activity requirements in section II.C. If that individual's research and graduate training activity should change, they may reapply for Graduate Faculty participation at any time.

E. Membership Appeal Process

Faculty appeal of any membership decision in EECS must be made in writing to the Graduate Studies Committee of EECS within 30 calendar days of the decision. The appeal is decided by a majority vote of all EECS Graduate Faculty (see Section VII for definition of quorum). Final written appeal may be made to the Dean of the Graduate School within 30 calendar days of the EECS Graduate Faculty vote.

III. Administration

Administration of the Electrical Engineering and Computer Science Graduate Program and its activities is vested in the Chair of the EECS Graduate Studies Committee with advice from the EECS Graduate Studies Committee Faculty.

IV. EECS Graduate Studies Committee

A. The Chair of the EECS Graduate Studies Committee will be appointed or removed by the EECS Director.

B. Duties of the EECS GSC Chair (there are many diverse issues) such as;
   1. Provide overall academic leadership for EECS Graduate Program.
   2. Develop and implement policies for EECS Graduate Program.
   3. Oversee complete graduate admission process.
   4. Oversee all necessary examinations for EECS graduate students (QE, Prelim and the Final Defense)
   5. Approval of Curricular Practical Training
   6. Make decisions regarding EECS Graduate Program exceptions to Policies
   7. Be responsible for coordinating all EECS administrative matters within the Graduate School.
   8. Manage the budgets of EECS Graduate Studies Committee.
   9. Submit course and curriculum changes and approval forms.
   10. Submit Bylaw changes and approval forms.
   11. Be responsible for the accuracy of all graduate publications related to EECS including web pages and catalog copy.
   12. Coordinate semester evaluations for all EECS graduate students, including Exit Interviews.

13. Collect Alumni Tracking Data
14. Review students every semester for RA & TA Renewal and make the decision on financial support
15. Run the process for the Best EECS Graduate Student Awards every spring semester
16. Managing and addressing student issues and problems of EECS Grad Students

V. Graduate Student Committees

C. The initial selection, or subsequent changes, of a graduate student's committee shall be determined jointly by the student and the student's advisor. In accordance with the Policies and Procedures of the Graduate School at WSU, graduate students are not permitted to serve on the committees of other graduate students.

D. The graduate committee of each student shall have a minimum of three members for MS and for Ph.D. A majority of committee members shall be active EECS Graduate Faculty members.

E. As specified in the Graduate School's Policies and Procedures, the performance of each graduate student shall be reviewed annually.

VI. Graduate Faculty Meetings

A. The Director of EECS shall call EECS Graduate Faculty meetings as needed but at least once per academic year. All attempts will be made to provide a written agenda in advance.

B. Other meetings may be called at the discretion of the Director or the Executive Committee.

C. A special meeting of EECS Graduate Faculty may be called by petition of 5 or more Graduate Faculty members.

D. Efforts will be made to communicate items of interest, including notification of a faculty meeting, to the faculty via e-mail. General EECS Graduate Faculty Meetings shall be called with a minimum of 1 week's notice.

E. Faculty not present on the Pullman campus at the time of a general EECS Graduate Faculty Meeting may participate by telephone conference call or other electronic means.

VII. Quorum

Unless specified otherwise, a quorum for purposes of voting and other decision making is defined as the majority of ***active*** EECS Graduate Faculty.

VIII. Amendments to Program Bylaws

A. The Program Bylaws document shall be reviewed every fifth year by the EECS Graduate Studies Committee.

B. Amendments to the Bylaws may originate from the EECS Graduate Studies Committee. Proposed amendments must be forwarded to the EECS Director. After discussion, amendments shall be forwarded to the EECS Graduate Studies Committee electronically at least 2 weeks prior to the faculty meeting at which the amendments will be discussed. After discussion, a minimum 2 week period will follow the faculty meeting prior to vote. Votes on amendments may occur at a faculty meeting or electronically. Amendments to the EECS Graduate Program Bylaws require a positive vote from the majority of all active EECS Graduate Faculty.

C. All amendments and revisions must be submitted to the Graduate Studies Committee and Faculty Senate for review and final approval.

IX. List of Initial Graduate Faculty Participants

A. List of initial EECS Graduate Faculty Participants:

Electrical Engineering and Computer Science, Graduate Faculty

Dave Bakken, PhD, Tenured

Present Position: Associate Professor, School of Electrical Engineering and Computer Science
Research Areas: Fault Tolerant computing, Distributed Quality of Service, Distributed Object Middleware, Distributed Computing

Ben Belzer, PhD., Tenured

Present Position: Associate Professor, School of Electrical Engineering and Computer Science
Research Areas: Wireless communication, Digital Communications, Control, Communications, and Signal Processing

Anjan Bose, PhD, Tenured

Present Position: Dean, College of Engineering and Architecture (1998-99) Director, School of Electrical Engineering and Computer Science (1993-1998) Distinguished Professor in Power, School of Electrical Engineering and Computer Science. Named WSU Eminent Professor (2008)
Research Areas: Energy and Power Systems

Shira Broschat, PhD, Tenured

Present Position: Professor and Curriculum Coordinator, School of Electrical Engineering and Computer Science, Adjunct Professor, Department of Veterinary Microbiology and Pathology
Research Areas:Rough surface scattering, Mathematical Modeling and Bioinformatics, Bioinformatics and Computational Biology

Diane Cook, PhD, Tenured

Present Position: Huie-Rogers Chair Professor
Research Areas: Robotics, Pervasive Computing, Parallel Algorithms and Applications, Machine Learning, Data Mining, Artificial Intelligence

Zhe Dang, PhD, Tenured

Present Position: Associate Professor, School of Electrical Engineering and Computer Science
Research Areas: Formal methods in Software Engineering, Formal methods in Security, Algorithms, Software Engineering

Jose Delgado-Frias, PhD, Tenured

Present Position: Professor and Boeing Centennial Chair in Computer Engineering, School of Electrical Engineering and Computer Science
Research Areas: VLSI Microarchitectures, Neural Network-Based Computing, Computer Networking, Computer Engineering

Janardhan Rao Doppa, Assistant Professor (fall 2014)

Research Area; Machine Learning/ A.I.

Thomas Fischer, PhD, Tenured

Present Position: Professor, School of Electrical Engineering and Computer Science
Research Areas: Source Coding and Quantization, Digital Signal Processing, Digital Communications, Control, Communications, and Signal Processing, Audio/Video Data Compression

Thoshitha Gamage, PhD, Research Assistant Professor

Present Position: Assistant Research Professor
Research Areas: GridStat Middleware Communication Framework: Systematic Adaptation

Assefaw Gebremedhin, Assistant Professor (fall 2014)

Research Area; Data Science.

Hassan Ghasemzadeh, PhD, Assistant Professor

Present Position: Assistant Professor
Research Areas: Embedded System Design including sustainable and green computing, low-power architectures, reconfigurable computing, and system-level optimization.

Kevin Glass, PhD, Non-Tenured Track

WSU Tri Cities
Present Position: Adjunct Faculty

Havard Fjaer Grip, PhD, Adjunct Assistant Professor

Adjunct Assistant Professor at WSU and Senior Research Fellow with the Research Council of Norway. Currently conducting an independent research project at WSU, funded by a personal research grant from the Research Council of Norway.

Subhanshu Gupta, Assistant Professor (fall 2014)

Research Area; MicroElectronics

Adam Hahn, Assistant Professor (fall 2014)

Research Area; Cyber Physical Systems/Security

Carl Hauser, PhD, Non-Tenure Track

Present Position: Associate Professor, School of Electrical Engineering and Computer Science, August 2001-present
Research Areas: Programming Language Design and Implementation, Power Grid Communication SystemsNetworking, Distributed Computing, Concurrent Programming

Deuk Heo, PhD, Tenured

Present Position: Associate Professor, School of Electrical Engineering and Computer Science
Research Areas: Wireless Sensor Microsystems, Ultra Wide-Band Communications, Opto ICs and Antenna, Opto Device Modeling, Microelectronics

Lawrence Holder, PhD, Tenured

Present Position: Professor Research Areas: Mathematical Modeling and Bioinformatics, Machine Learning, Graph Theory, Data Mining, Computer Security, Artificial Intelligence

Scott Hudson, PhD, Tenured

Present Position: Professor, School of Electrical Engineering and Computer Science, WSU Tri-Cities. Visiting Scientist, Jet Propulsion Laboratory, California Institute of Technology
Research Areas: Radar Imaging, Radar Astronomy, Optical Signal Processing, Electrophysics

Chris Hundhausen, PhD, Tenured

Present Position: Associate Professor, School of Electrical Engineering and Computer Science
Research Areas: Human-Computer Interaction, Engineering Education, End-User Programming, Empirical Studies of Programmers, Computer-based Visualization

Ananth Kalyanaraman, PhD, Tenure Track

Present Position: Assistant Professor, School of Electrical Engineering and Computer Science, Washington State University, Pullman
Research Areas: Parallel Algorithms and Applications, Combinatorial Pattern Matching and String Algorithms, Bioinformatics and Computational Biology

Dae Hyun Kim, Assistant Professor (fall 2014)

Research Area; MicroElectronics

Min Sik Kim, PhD, Non-Tenure Track

Present Position: Assistant Professor, School of EECS
Research Areas: Distributed Computing, Computer Networking

George LaRue, PhD, Tenured

Present Position: Associate Professor, School of Electrical Engineering and Computer Science
Research Areas: Microelectronics, High-Speed Interconnects and Switches, Broadband Satellite Communications, Mixed-Signal Integrated Circuit Design

Robert R. Lewis, PhD, Tenured

Present Position: Associate Professor, School of Electrical Engineering and Computer Science, WSU Tri-Cities
Research Areas: Wavelets, Scientific Computation, Programming Environments, Numerical Analysis, Computer Graphics, Computational Geometry. Application Languages

Chen-Ching Liu, PhD, Professor

Boeing Distinguished Professor of Electrical Engineering. Director, Energy Systems and Innovation Center (ESIC)
Research Areas: Information collection, delivery, and analysis, Integration of renewable energy resources, Decision support, public policy, human behaviors, and economics, Efficiency on the demand side (buildings), Efficient use of right-of-way and associated economic issues, Cyber security of the smart grid.

Saeed Lotfifard, Assistant Professor (fall 2014)

Research Area; Power Systems

A. David McKinnon, PhD, Non-Tenure Track

WSU Tri Cities
Present Position: Adjunct Faculty
Research Areas: Computer Security, Distributed Computing

Ali Mehrizi-Sani, PhD, Assistant Professor

Present Position: Assistant Professor in Electrical Engineering and Computer Science
Research Area: Integration of renewable energy resources in the power system; Power electronics interfaces for distributed generation; Control and management of microgrids and smart grid; Power system applications of power electronics

John Miller, PhD, Tenured

Present Position: Associate Professor in the School of Electrical Engineering and Computer Science, WSU Tri-Cities.
Research Areas: Parallel systems, Numerical Analysis, Computer Simulation of Biological Systems, Bioinformatics and Computational Biology

Robert Olsen, PhD, Tenured in Engr.

Present Position: Boeing Distinguished Professor of Electrical Engineering, School of Electrical Engineering and Computer Science
Research Areas: High-Voltage Engineering, Energy and Power Systems, Electrophysics, Electromagnetic Environment of Power Transmission Lines, Antenna Theory, Power System Electromagnetic Compatibility

Mohamed Osman, **PhD, Tenured**

Present Position: Professor, School of Electrical Engineering and Computer Science, WSU Tri-Cities
Research Areas: Transport Theory, Semiconductor Devices, Quantum Transport, Microelectronics, Electrophysics

Partha Pratim Pande, PhD, Tenure Track

Present Position: Assistant Professor, School of EECS, Washington State University
Research Areas: System On Chip Design and Test, Reliability in MP-SoC Platforms, Network on Chip, Fault Tolerance, Computer Engineering

Patrick Pedrow, PhD, Tenured

Present Position: Associate Director & Associate Professor, School of Electrical Engineering and Computer Science
Research Areas: Plasma Engineering, High-Voltage Engineering, Electrophysics

John Ringo, PhD, Tenured

Present Position: Professor, School of Electrical Engineering and Computer Science. Director, National Science Foundation Center for Design of Analog-Digital Integrated Circuits
Research Areas: Microelectronics, Integrated Circuits, Electronics, Computer Simulation of Biological Systems, Bioinstrumentation

Sandip Roy, PhD, Tenured

Present Position: Assistant Professor, School of Electrical Engineering and Computer Science
Research Areas: Uncertainty Evaluation, Stochastic Network Modeling, Power Systems Simulation, Decentralized Control Theory, Control, Communications, and Signal Processing

Ali Saberi, PhD, Tenured

Present Position: Professor, School of Electrical Engineering and Computer Science
Research Areas: Optimal Control, Non Linear Systems and Control, Linear Systems and Control, Linear Robust Control, Filtering and Inverse Filtering, Fault Detection and Isolation, Dynamic and Complex Networks, Control, Communications, and Signal Processing, Constrained Control Problems, Complex Systems, Adaptive Control and Filtering

John Schneider, PhD, Tenured

Present Position: Associate Dean for Undergraduate Programs and Student Services, School of Electrical Engineering and Computer Science
Research Areas: Wave Propagation and Scattering, Remote Sensing, Optics, Electrophysics, Electromagnetics, Accoustics

Behrooz Shirazi, PhD. Tenured

Present Position: Huie-Rogers Chair Professor and Director

Research Areas: Software tools, Scheduling and load balancing, Pervasive Computing, Parallel systems, Distributed real-time systems, Distributed Computing

Krishnamoorthy Sivakumar, PhD, Tenured

Present Position: Associate Professor, School of Electrical Engineering and Computer Science Chair of EE Curriculum Committee
Research Areas: Statistical Modeling, Estimation, and Analysis, Signal detection Under 2D Intersymbol Interference, Nonlinear Signal and Image Processing, Multivariate Gene-Expression Relationships, Knowledge Discovery in Databases, Data Mining, Control, Communications, and Signal Processing

Anurag K. Srivastava, PhD, Assistant Professor

Assistant Professor at Washington State University in the School of Electrical Engineering and Computer Science.
Research Areas: Develop power system operation and control algorithms utilizing smart grid data and real time validation of these developed algorithms

Anton Stoorvogel, PhD, Adjunct Faculty
Mathematical System and Control Theory

Li Tan, PhD, Non-Tenure Track

Present Position: Clinical Assistant Professor (Tri Cities)
Research Areas: Software Engineering

Matt Taylor, PhD, Assistant Professor

Assistant Professor at Washington State University in the School of Electrical Engineering and Computer Science and is a recipient of the National Science Foundation CAREER award.
Research Areas: intelligent agents, multi-agent systems, reinforcement learning, transfer learning, and robotics.

Mani Venkatasubramanian, PhD, Tenured

Present Position: Professor, School of Electrical Engineering and Computer Science. EECS Representative on CEA Tenure and Promotion Advisory Committee
Research Areas: Voltage Stability Analysis of the Large Power System, Power System Dynamics, Stability and Control, Non Linear Systems and Control, Energy and Power Systems, Differential-Algebraic Equations

Seema Verma, PhD, Non-Tenure Track

WSU Tri Cities
Present Position: Adjunct Faculty
Research Areas: Genomic Biology, Bioinformatics and Computational Biology

KC Wang, PhD, Tenured

Present Position: Professor, School of Electrical Engineering and Computer Science
Research Areas: Parallel systems, Parallel Algorithms and Applications, Networking, Network Operating Systems, Distributed Operating Systems, Distributed Computing, Concurrent Programming, Computer Networking

Yinghui Wu, Assistant Professor (fall 2014)

Research Area; Data Science/ Programming

B. The Chair of the Graduate Studies Committee of the EECS Graduate Program is responsible for submitting an updated list of active and inactive EECS Graduate Faculty participants to the Dean of the Graduate School for approval annually.