WSU's Commitment to Cybersecurity

Partha Pande
Director, School of EECS
NEW CYBERSECURITY UNDERGRADUATE PROGRAM

- State has approved funding
- New faculty lines
- On-going faculty recruitment
- Curriculum development
- Involvement of faculty from Pullman, TC and Everett
- Brainstorming with industry leaders
ACCOMPLISHMENTS (SINCE AUG 2021)

- **Three new cybersecurity courses** approved by faculty senate
  - CptS 327: Introduction to cybersecurity
  - CptS 427: Applied cybersecurity
  - CptS 428/528: Advanced cybersecurity

- **A bi-weekly virtual seminar series** featuring cybersecurity experts from industry and academia
  - Spring 2022: 7 seminars
  - Fall 2021: 5 seminars

- **Website** ([https://www.cyser.wsu.edu](https://www.cyser.wsu.edu)) providing information to current and prospective students

- **A two-weeks summer workshop** happening now (May 23 – June 3)
STUDENT POPULATION: STATISTICS

[Bar chart showing student population statistics by semester from Fall 2010 to Fall 2021. The categories include Computer Science Graduate Students, Electrical and Computer Engineering Graduate Students, Computer Engineering Undergraduates, Electrical Engineering Undergraduates, Bremerton - Electrical Engineering Undergraduates, Everett - Electrical Engineering Undergraduates, Computer Science Undergraduates, Software Engineering Undergraduates, Everett - Software Engineering Undergraduates, and Data Analytics Undergraduates.]
Degrees Granted by Fiscal Year
All programs in EECS accredited by ABET, but by two different commissions:

- Engineering Accreditation Commission (EAC): EE, CptE, SE
- Computing Accreditation Commission (CAC): BA & BS CptS

ABET generally grants six-year accreditation periods

EECS’s most recent site visit occurred Sep./Oct. 2019

EECS received full accreditation till 2026

The Cybersecurity undergraduate program will be ABET accredited too
PNNL/WSU Advanced Grid Institute (AGI) – ESIC REP Update

April 12, 2022

Jeff Dagle, Co-Director
PNNL

Noel Schulz, Co-Director
WSU
IBM PhD Research Scholarship (Syrine Belakaria, Jana is the adviser)

2021 George Pólya Prize in Applied Combinatorics (Assefaw and his collaborators)

ACM TODAES Best Paper Award (Ganapati, Jana and Partha)

CIGRE Medal 2021 (Anjan Bose)

New WSAS member (Noel Schulz)

International Joint Conference on Artificial Intelligence (IJCAI), Early Career Spotlight (Jana)

SIGDA PhD Dissertation Award 2022 (Ganapati Bhat)
Computer Science and Engineering (CSE) graduate program ranking is governed by CSRankings: Computer Science Rankings (csrankings.org) currently is followed all over the world. CSE is a vast and rapidly evolving field. Hence, instead of having one overall ranking, the accepted norm is to follow topic-wise ranking. The school of EECS has been focusing on two broad topics currently: (i) Design Automation (DA) (ii) High-performance Computing (HPC). One can see that the ranking of the school has evolved for these two topics. The ranking of University of Washington are provided for reference within brackets.

In summary, the school of EECS is within top 10 in DA and within top 20 in HPC currently. Also, the improvement in ranking from 2005-2010-time frame to 2015-2020-time frame is significant. As a point of reference, WSU is higher ranked than University of Washington in both DA and HPC currently. Hence, we can say that the school has made significant stride to achieve excellence within a niche area of CSE and we should keep on focusing to either maintaining or improving our ranking on these two topics in near future. Following shows the ranking of the top 20 schools considering Design Automation and HPC (2015-2020) together (As of 9th May 2020).

1 Univ. of Illinois at Urbana-Champaign
2 University of California - Riverside
3 University of California - San Diego
4 Northeastern University
5T Washington State University
5T Georgia Institute of Technology
7 University of Maryland - College Park
8 Northwestern University
9 University of California - Berkeley
10 University of Pittsburgh
11 Duke University and University of Michigan
13 University of California - Irvine and University of Central Florida
15 University of California - Los Angeles
16 Virginia Tech
17 Pennsylvania State University and University of Utah
19 University of Notre Dame
20 Carnegie Mellon University

<table>
<thead>
<tr>
<th>Topic</th>
<th>2005-2010</th>
<th>2015-2020</th>
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<tbody>
<tr>
<td>Design Automation</td>
<td>36 (No Ranking)</td>
<td>7 (32)</td>
</tr>
<tr>
<td>High-performance Computing</td>
<td>52 (74)</td>
<td>17 (78)</td>
</tr>
</tbody>
</table>
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3 Northeastern University
4 Washington State University
5 University of California - San Diego
6 University of California - Irvine
7 Georgia Institute of Technology
8 Northwestern University
9 Duke University and University of Maryland - College Park
11 University of Utah and NCSU
13 University of Michigan
14 University of California – Berkeley
15 Virginia Tech
16 UCLA, UCSB and University of Pittsburgh
19 Penn State, TAMU and UCF
22 University of Notre Dame
COMPUTER SCIENCE RANKINGS CONTINUE TO RISE (2017-2022) (EDA AND HPC)

1. Univ. of Illinois at Urbana-Champaign
2. Washington State University
3. Northeastern University
4. University of California - Riverside
5. University of California - San Diego
6. University of California - Irvine
7. Georgia Institute of Technology
8. Northwestern University
9. University of Utah
10. Duke University
11. University of Michigan
12. University of Central Florida
13. UCSB
14. University of California – Berkeley, University of Pittsburgh
16. NCSU
17. Penn State
18. TAMU
19. UCLA, University of Maryland, College Park, University of Notre Dam
Thank you