

2023 Board Nominee

Xipeng Shen

Professor

North Carolina State University



CRA

Computing Research
Association

Awards and Honors and Year Received

2011 Early Career Award, U.S. Department of Energy

2010 NSF CAREER Award

2015 Google Faculty Research Award

2018 ACM Distinguished Member

2018 University Scholar Award

Involvement in CRA Activities

I have participated in some CRA activities, such as helping the department in collecting info needed for the Taulbee Survey, posting job opportunities at CRA Jobs, and encouraging underrepresented students to attend CRA-WP events. I haven't got the chance to participate in organizing activities of CRA. I have however been on the organizing committees of numerous conferences (e.g., General Chair of ASPLOS'18, Program Chair of PPOPP'20, etc.).

Other Relevant Experience

- * General Co-Chair, International Conference on Architectural Support for Programming Languages and Operating Systems (ASPLOS), 2018.
- * Steering Committee Co-Chair, International Conference on Architectural Support for Programming Languages and Operating Systems (ASPLOS), 2018-2020.
- * Program Chair, the 25th ACM SIGPLAN Symposium on Principles and Practice of Parallel Programming (PPOPP), 2020.
- * Steering Committee, ACM SIGPLAN Symposium on Principles and Practice of Parallel Programming (PPOPP), 2020-present.
- * Program Chair, the 25th ACM SIGPLAN International Conference on Compiler Construction (CC), 2023.

Research Interests

- * Compiler and Programming Systems
- * Programming Language Implementation
- * Parallel (Heterogeneous) Computing
- * Real-Time Artificial Intelligence and High-Performance Machine Learning
- * Software-Hardware Co-Design

Personal Statement

Xipeng Shen has published over 150 research papers and chaired numerous major conferences and steering committees. His pioneering research in GPU and multicore compilation has influenced the development of modern heterogeneous computing and ML compilation. He emphasizes diversity and academic-industry collaborations in research. More than a third of his graduated Ph.Ds are from underrepresented groups. He co-founded a company and had been a consultant or advisor of numerous major IT companies. He is an ACM Distinguished Member and an IEEE senior member.