Pengfei Su

McGlothlin-Street Hall
Williamsburg, VA, USA

Email: psu@email.wm.edu
Phone: (1)757-332-6533

Education

- **College of William & Mary** — Williamsburg, VA
  P.h.D in Computer Science, GPA: 3.87/4 — *Aug 2016 - Aug 2020*
- **Institute of Computing Technology, Chinese Academy of Sciences** — Beijing, China
  M.S. in Computer Science, GPA: 87/100, Rank: Top 10% — *Aug 2013 - Jun 2016*
- **Yunnan University** — Yunnan, China
  B.S. in Computer Science, GPA: 91/100, Rank: 3/298 — *Aug 2009 - Jun 2013*

Skills

- Languages: C/C++, Java, Python, Go, Shell
- Tools&Libraries: Linux Perf, Intel Pin, JVMTI, MPI, OpenMP, Pthread

Research Interests

Program Performance Analysis, High Performance Computing, Software Engineering

Research Experience

- **College of William & Mary** — Williamsburg, VA
  Research Assistant — *Aug 2016 - Current*
  Working with Dr. Xu Liu on developing tool infrastructures to pinpoint and quantify various software inefficiencies.

Teaching Experience

- **College of William & Mary** — Williamsburg, VA
  Teaching Assistant for Programming Languages (CSCI312) — *Spring 2018, Fall 2017*
- **College of William & Mary** — Williamsburg, VA
  Teaching Assistant for Algorithms (CSCI303) — *Spring 2017, Fall 2016*

Industry Experience

- **Uber** — Palo Alto, CA
  Software Engineering Intern — *May 2019 - Aug 2019*
  Built a PMU-based profiler for Go

Professional Service

- Artifact Evaluation Committee: CGO'18&19, PPoPP'18&19
- Conference Sub-reviewer: ICPP'17&19, BIGCOM'19
- Conference Volunteer: ASPLOS'18

Publications

- **[SC'19]** Pinpointing Performance Inefficiencies via Lightweight Variance Profiling, **Pengfei Su**, Shuyin Jiao, Milind Chabbi, Xu Liu, The International Conference for High Performance Computing, Networking, Storage and Analysis, Nov 17-22, 2019, Denver, CO, USA.
- **[ESEC/FSE'19]** Pinpointing Performance Inefficiencies in Java, **Pengfei Su**, Qingsen Wang, Milind Chabbi, Xu Liu, The 27th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering, Aug 26 - 30, 2019, Tallinn, Estonia.

- [**ICSE'19**] Redundant Loads: A Software Inefficiency Indicator, **Pengfei Su**, Shasha Wen, Hailong Yang, Milind Chabbi, Xu Liu, The 41st IEEE/ACM International Conference on Software Engineering, May 25 - Jun 1, 2019, Montreal, Canada. ACM SIGSOFT Distinguished Paper Award
- [**PPoPP'19**] Lightweight Hardware Transactional Memory Profiling, Qingsen Wang, **Pengfei Su**, Milind Chabbi, Xu Liu, The 24th ACM SIGPLAN Symposium on Principles and Practice of Parallel Programming, Feb 16-20, 2019, Washington, D.C.. Best Paper Award
- [**Under Review**] An Object-centric Profiler for Java, Bolun Li, **Pengfei Su**, Milind Chabbi, Xu Liu.

Honors and Awards

- SIGSOFT Travel Grant for ESEC/FSE'19 2019
- Distinguished Paper Award of ICSE19 2019
- Best Paper Award of PPoPP'19 2019
- SIGPLAN Travel Grant for PPoPP'19 2019
- NSF Travel Grant for PPoPP'19 2019