

EDUCATION

Boston University

MS Computer Science

Expected 05/2025

- Dual degree program with BA

BA Computer Science

Expected 05/2025

- Cumulative GPA: 3.7/4.0
- Thomas M. Menino Scholarship recipient (full-tuition)
- Notable Courses: Object Oriented Design (CS611), Cloud Computing (CS 528), Operating Systems (CS 552), Algorithms (CS 630), Machine Learning (CS 542), Functional Programming (CS 320)

WORK HISTORY

BU Student Researcher under Rich West, Boston University

07/2024 - Present

- **RT-DDS**: Built a publisher-subscriber real-time data distribution service on the Quest real-time OS and tested with DSP at 44kHz or 25 microseconds.
- RT-DDS is the only data distribution service on a real-time OS, meaning it can provide unparalleled timing and predictability guarantees in contrast to GStreamer or ROS/ROS2.

BU Red Hat Collaborator, Boston University

09/2023 - 07/2024

- **Unikernel Linux**: Hacked Linux to dynamically link applications to the kernel for performance gains in industrial workloads (e.g., improved Redis throughput by 22%)
- **OPE Gradescope Bridge**: Implemented scalable OpenShift service REST API for grading student assignment code in Open Education Framework
- **OPE Testing**: Automated testing in container build process with GitHub Actions shell and Jupyter Notebook tests; reduced container build time by 70% using mamba

Teaching Assistant, Boston University, Boston, MA

09/2022 - Present

- Taught CS 131 (Combinatorics) for two semesters and CS 330 (Algorithms) for 4 semesters
- Lead 2 hours of classroom discussions and 3 office hours each week
- Curate weekly problem sets in graph analysis and dynamic programming
- Grade student exams

Publications

- Ross Mikulskis, Peter West, Rafi Syed, Zhiyuan Ruan, Richard West. **“RT-DDS: A Real-Time Data Distribution Service for Task Pipeline Processing”**, manuscript in preparation for RTAS '25

PROJECTS (www.github.com/rkulskis)

Fraternity App, Independent

01/2024 - Present

- Leading an agile team in developing an app in FlutterFlow to help greek life organizations orchestrate events with a shared calendar and send messages
- Prototyped designs in Figma for Phi Kappa Tau

Bits of CS Inc., Independent

03/2023 - Present

- Founded 501(c)(3) nonprofit for free online education.
- Authoring a computer science textbook covering college-level curricula (www.bitsofcs.com)
- Earned \$700 from BU Student Academic Enhancement Fund

Standalone Operating System, School

12/2023

- Co-developed a virtual disk in C and Assembly on intel i386 architecture with FIFO thread scheduling, inode-based file system, dual-mode system calls, and memory mapping

SKILLS AND INTERESTS

- **Coding Skills**: Python, Rust, C/C++, JavaScript, Docker, GitOps, Bash, OCaml, SQL, Go, OpenShift, Emacs, FlutterFlow, Typescript, HTML, Nextjs, Figma
- **Interests**: Operating systems, blockchain, charity, Jazz trumpet, guitar, magic tricks, fitness

VOLUNTEER WORK

Big Brothers Big Sisters of Eastern Mass

10/2023 - Present

- Volunteer as a Big Brother in BU on-campus community program
- Connect for 4 hours through sports and games with little brother every 2 weeks

Charity Runner in Falmouth Road Race

08/2023

- Raised \$850 in funds for *Soccer Without Borders Boston*

Fundraising Chair, Phi Kappa Tau

01/2023 - 05/2023

- Installed shared Linux server for STEM majors in fraternity
- Organized a concert with Berklee student-led bands with net profit of \$800