

**EDUCATION**

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**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**

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**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**

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- 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](https://www.github.com/rkulskis))

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**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](https://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**

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- **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

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### 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

## HONORS AND AWARDS

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- **Hariri Institute Student Excellence Award**, Boston University

06/2024