

(617) 690-9816

ROSS MIKULSKIS  
<https://github.com/rkulskis>

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## EDUCATION

<b>Ph.D., Computer Science, Boston University</b> <ul style="list-style-type: none"><li>Specialization in Real-time Operating Systems</li><li>Advisor: Richard West</li></ul>	<b>Start 09/2025</b>
<b>B.A./M.S., Computer Science, Boston University</b> <ul style="list-style-type: none"><li><b>Cumulative GPA: 3.73/4.0</b></li></ul>	<b>05/2025</b>
<b>Boston Latin School</b>	<b>06/2021</b>

## SKILLS

- Programming Languages:** C, Python, Bash
- Tools & frameworks:** Kubernetes, Docker, Git, Emacs, Google Cloud Services
- Specialties:** CI/CD, Real-Time Operating Systems, Kernel Development

## PROJECTS

<b>Omnitest</b> <ul style="list-style-type: none"><li>Built a language-agnostic testing framework for CI/CD testing</li></ul>	<b>01/2025</b>
<b>Bits of CS Inc.</b> <ul style="list-style-type: none"><li>Founded a nonprofit, free online education.</li><li>Authored a college-level curricula computer science textbook, published online (<a href="http://www.bitsofcs.com">www.bitsofcs.com</a>)</li></ul>	<b>03/2023 - Present</b>
<b>Standalone Operating System</b> <ul style="list-style-type: none"><li>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</li></ul>	<b>12/2023</b>

## WORK HISTORY

<b>ProDex Labs, Boston, MA</b> , Software Engineer - Contracted <ul style="list-style-type: none"><li>Orchestrated AI Agentic workflows which optimize manufacturing simulations</li><li>Deployed web app to Google Cloud</li></ul>	<b>05/2025 - Present</b>
<b>Red Hat, Boston, MA</b> , Cloud Engineer Intern <ul style="list-style-type: none"><li><b>Unikernel Linux:</b> Hacked Linux with Professor Orran Krieger, PhD, to dynamically link applications to the kernel for performance gains in industrial workloads (e.g., improved Redis throughput by 22%)</li><li><b>OPE Gradescope Bridge:</b> Implemented scalable OpenShift service REST API for grading student assignment code in Open Education Framework</li><li><b>OPE Testing:</b> Automated testing in container build process with GitHub Actions shell and Jupyter Notebook tests; reduced container build time by 70% using mamba</li></ul>	<b>09/2023 - 07/2024</b>
<b>Boston University, Boston, MA</b> , Teaching Assistant <ul style="list-style-type: none"><li>Taught CS 131 (Combinatorics) for two semesters and CS 330 (Algorithms) for 5 semesters</li></ul>	<b>09/2022 - 05/2025</b>

## PUBLICATIONS

- R. Mikulskis, P. West, R. Syed, Z. Ruan, and R. West. **“RT-DDS: A Real-Time Data Distribution Service for Task Pipeline Processing”**. Manuscript in preparation.

## HONORS AND AWARDS

- Hariri Institute Student Excellence Award**, Boston University **06/2024**
- BU Student Academic Enhancement Fund**, Awarded \$700 for Bits of CS textbook **10/2023**
- Thomas M. Menino Scholarship recipient (merit, full-tuition)**, Boston University **03/2021**
- All-State Jazz Trumpet - 2nd place**, MMEA All-State **01/2021**

## VOLUNTEER WORK

<b>Big Brothers Big Sisters of Eastern Mass</b> <ul style="list-style-type: none"><li>Volunteer Big Brother in BU community program, meet with brother every 2 weeks</li></ul>	<b>10/2023 - Present</b>
<b>Charity Runner in Falmouth Road Race</b> <ul style="list-style-type: none"><li>Raised \$850 in funds for <i>Soccer Without Borders Boston</i></li></ul>	<b>08/2023</b>
<b>Fundraising Chair, Phi Kappa Tau</b> <ul style="list-style-type: none"><li>Organized a concert with Berklee student-led bands with net profit of \$800</li></ul>	<b>01/2023 - 05/2023</b>