

Kyla Levin

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EDUCATION

University of Massachusetts Amherst

M.S. / Ph.D. Computer Science, Advisor: Emery Berger

GPA: 3.96

Expected Graduation: May 2028

Tufts University

B.S. Chemical Engineering and Computer Science, *magna cum laude*

May 2023

SKILLS

Programming Languages: C++, C, Java, Python, HTML5, JavaScript, Ruby

Skills: OpenAI, Bedrock, GDB, LLDB, PDB, Undo.io, Docker, Adobe, Git, Linux OS, LaTeX

RESEARCH

PLASMA Lab with Emery Berger

University of Massachusetts Amherst

Sep 2023 – Present

- *ChatDBG*: Developed a new debugging tool to converse with large language models to reduce user involvement and make conventional debuggers more accessible to software developers. ChatDBG enables LLMs to autonomously answer complex user queries about program behavior. Available at <https://dl.acm.org/doi/10.1145/3729355>.
- *Pythoness*: Investigating a tool that uses LLMs to automatically generate rigorous and efficient code through natural-language descriptions and tests. Currently expanding the automatic testing framework that creates and runs unit tests, property-based tests, class constraints, and integration tests on generated code.

The Foster Lab with Jeffrey Foster

Tufts University

May 2022 – May 2023

- Developed REST_π , a novel path-sensitive type inference system that elevates REST API documentation generation by accurately capturing the relationship between API input and application and output. SPLASH'25.
- Analyzed the quality of REST API specs created with REST_π implemented for Ruby built on *RDL*, an existing type-inferencing tool, against publicly used documentation software such as SwaggerHub and Postman.

The Cowen Lab with Lenore Cowen

Tufts University

Jun 2021 – Sep 2021

- Assisted on a graduate project on using protein networks to locate causal genes for Parkinson's Disease and programmed modules that could execute an efficient graph-searching algorithm to traverse protein nodes.
- Published "Neighborhood embedding and re-ranking of disease genes with ADAGIO" with Mert Erden and Lenore Cowen and presented at ACM-BCB 2022. <https://doi.org/10.1145/3535508.3545542>

WORK EXPERIENCE

Applied Scientist Intern

Amazon Web Services

May – August 2025

- Completed a research internship at AWS with the Automated Reasoning team under manager Mike Hicks.

Littauer Library Student Assistant Programmer

Harvard University

May 2023 – Sep 2023

- Performed full stack development on the Judaica Division's digital collection of 8M+ records in FileMaker.
- *Front end*: Designed new web interfaces and organized a database architecture that optimized the accessibility of database navigation for people across various programming backgrounds and languages.
- *Back end*: Wrote compilation programs to better visualize collection statistics, analyze the data, and print the results into comprehensive reports.

Teaching Assistant for Discrete Math, Cryptography, and Computation

University of Massachusetts Amherst and Tufts University

Aug 2020 – Dec 2023

- Graded and reviewed feedback on all student homework assignments and exams for classes of 160+. Led students through peer-to-peer learning in recitations, workshops, review sessions, weekly office hours, and on Piazza.
- Wrote administrative software in C++ to help lecturing faculty with organizing grades and student data.