Cassandra Sziklai

📍 Ithaca, NY

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EDUCATION

Cornell University, College of Arts & Sciences   Ithaca, NY
B.A. in Computer Science   Aug 2021 - May 2025
- GPA: 3.76

EXPERIENCE

Undergraduate Researcher   Ithaca, NY
Cornell University, Capra Lab   Jun 2024 - Present
- Develop advanced programming data structures to enhance packet scheduling efficiency in hardware using Calyx (intermediate language for hardware accelerator generators)
- Design and implement Rio, a new domain-specific language (DSL) to facilitate user-defined scheduling policies, to be seamlessly compiled into our hardware framework

Teaching Assistant   Ithaca, NY
Cornell University   Jan 2024 - Present
- CS 4300: Language and Information (Spring 2025) - Hold office hours to provide assistance on information retrieval and computational linguistics assignments in Python
- CS 2110: Object-Oriented Programming (Spring 2024 – Fall 2024): Held office hours, graded assignments in Java, and led discussion section for 30+ students.

UX Design Intern   Boonton, NJ
Hubbell   May 2023 - Aug 2023
- Conducted an accessibility audit of AclaraONE software application spanning 181 screens, laying out the roadmap for achieving accessibility compliance
- Provided code-level recommendations to meet WCAG 2.1 compliance

PERSONAL PROJECTS

Bignum RSA encryption   Nov 2024 - Dec 2024
- Implemented a custom Bignum class to represent large numbers for RSA encryption/decryption
- Diagnosed performance bottlenecks using gprof profiling to optimize computation, achieving a 120x speedup

Student Database System   Jun 2024 - Aug 2024
- Created a dynamic full-stack student database system by leveraging Spring Boot, React.js, and MySQL
- Implemented RESTful APIs for secure and scalable data retrieval

Portfolio Website   Jul 2023 - Aug 2023
- Developed a modern, interactive portfolio website to showcase my projects using React.js and CSS

SKILLS

Programming languages: Python, C++/C, Java, OCaml, HTML/CSS, Javascript
Frameworks: React.js, Spring Boot, Java Persistence API (JPA), Maven, D3.js, Handlebars.js
Tools: GitHub, Linux, SQL, Logism, LaTeX, Excel
Misc: Systems Programming, Algorithm Optimization, Profiling & Benchmarking