

Eric Lu

678-761-7128 | elu66@gatech.edu | [linkedin.com/in/ericlu327/](https://www.linkedin.com/in/ericlu327/) | github.com/ericlu327

EDUCATION

Georgia Institute of Technology
Bachelor of Science in Computer Science

Atlanta, GA
Aug. 2023 – May 2026

EXPERIENCE

Software Engineering Intern
Itential

January 2024 – May 2024
Atlanta, GA

- Led the development of an automated security vulnerability remediation system at Itential, significantly enhancing network security by ensuring dependencies are up-to-date and reducing exposure to potential threats. Achieving a massive reduction in manual workload from 60 hours to 10 minutes.
- Proficiently utilized CI/CD pipelines and implemented comprehensive unit and integration tests to streamline development workflows and deliver high-quality software in a timely manner.

Undergraduate Researcher
Georgia Institute of Technology

August 2024 – Present
Atlanta, GA

- Collaborated on developing a framework for automating algorithm design using genetic programming techniques, enhancing the efficiency of algorithm generation.
- Expanded large language models to improve evolutionary algorithms, focusing on selection, mutation, mating, and evaluation functions.
- Conducted performance analysis and benchmarking of automated algorithms to optimize speed, accuracy, and resource utilization in real-world applications.

PROJECTS

Titanic ML Problem | *Machine Learning, Genetic Programming, Python, Git*

Sep. 2024

- Solved the Titanic survival prediction problem with a machine learning model, achieving 90% accuracy by utilizing decision trees, random forests, and support vector machines.
- Implemented a custom Genetic Programming (GP) evolutionary loop to optimize model parameters and improve accuracy through iterative selection and mutation processes.

Atlanta Food Finder | *Python, Google API, Django, HTML, CSS, git, JavaScript*

Sep. 2024 – October 2024

- Acquired proficiency in Django and Google Maps API by designing and developing a web application, Atlanta Food Finder, that helps users locate and explore restaurants in Atlanta.
- Demonstrated project management abilities and teamwork by adhering to Scrum methodologies, planning the application's architecture, and implementing features like search functionality, user reviews, ratings, and real-time directions.

Spotify Wrapped | *Python, Spotify API, Django, HTML, CSS, git*

October 2024

- Acquired proficiency in Django and Spotify API by designing and developing a web application that generates and personalized Spotify Wrapped experiences, including Duo-Wrapped comparisons, LLM-based dynamic descriptions, and seasonal special versions.
- Demonstrated creativity and technical expertise in implementing features such as interactive games, playback functionality, and API-driven music data analysis for enhanced user interaction.

Portfolio Website | *React.js, Node.js, HTML, CSS*

August 2024 – October 2024

- Developed a dynamic and interactive portfolio website using React and JavaScript, along with HTML and CSS, to enhance user experience and improve website functionality.
- Demonstrated strong project management skills and creativity by designing a responsive user interface, planning the website architecture, and integrating aesthetic and functional components through React's component-based structure and JavaScript's interactivity.

TECHNICAL SKILLS

Languages: Java, Python, SQL (Postgres), JavaScript, HTML/CSS

Frameworks: React.js, React Native, Node.js, Express.js

Developer Tools: Git, VS Code, PyCharm, IntelliJ, Git CI/CD

Libraries: pandas, NumPy, Matplotlib, Django