

# Ethan Saddler

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## EDUCATION

### Georgia Institute of Technology

08/2022 – 05/2026

*B.S. in Computer Science – Major GPA: 4.0 / Overall GPA: 3.93*

*Atlanta, GA*

## EXPERIENCE

### Software Engineering Intern

05/2024 - 08/2024

*AstraZeneca*

*Wilmington, DE*

- Refactored 3 EDI data transformation pipelines in Python and Java, eliminating false validations of incomplete documents and enhancing document transformation throughput by 70%.
- Collaborated with teams at SnapLogic to create new web-based modules for developers to handle financial document parsing, reducing development time by 90%.
- Enhanced recipient acknowledgements for contractor transactions in Python, with a focus on sophisticated error handling and improved data logging accuracy.

### Founding Engineer

12/2022 - 11/2023

*RoadSense*

*Atlanta, GA*

- Engineered data transfer and analysis solutions for RoadSense units, implementing raw accelerometer data transfer to Firebase using C++, and managing data collection via a Python backend, reducing memory usage on each unit by up to 50%.
- Designed a script in Python to filter and simplify over 300,000 data points per hour from each unit, enhancing data processing efficiency and accuracy.
- Created an Electron application for visualizing RoadSense data, incorporating embedded HTML files to display interactive heatmaps over Google Maps, significantly improving the user interface and data presentation.

## PROJECTS

### Sentiment Analysis Trading Bot | *Python*

05/2024 - 06/2024

- Developed a real-time data feed system that extracts and processes financial news articles and social media posts to gauge market sentiment.
- Utilized Natural Language Toolkit (NLTK) to integrate advanced natural language processing (NLP) techniques to translate qualitative data into quantitative scores that trigger trades.
- Leveraged machine learning to create a sentiment analysis algorithm to automate trading decisions, executing trades via the Alpaca API based on dynamic stock sentiment scores.

### Tetris AI | *Javascript, HTML5, CSS*

05/2023 - 08/2023

- Developed an AI, as well as a corresponding web app, that is able to endlessly clear lines in Tetris.
- Trained using a genetic algorithm written in JavaScript, optimizing 4 parameters describing game state.
- Created game graphics, animations, controls, scoring and object interactions.

## SKILLS

**Languages:** Python, Java, JavaScript, C, C++, HTML5, CSS, MATLAB, SQL

**Libraries/Frameworks:** NodeJS, Electron, Selenium, React, Bootstrap, Tailwind, jQuery, NumPy, Gradio, ChromaDB, OAuth, LangChain.

**Technologies:** GIT/GitHub, VS Code, WordPress, LATEX, CAD, Excel, Linux (Ubuntu and Mint), AWS, Docker, Google Cloud, Firebase, FTP, OpenAI, SnapLogic