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Actively seeking a Summer 2024 internship in AI development to leverage a strong background in generative AI; eager to contribute innovative problem-solving skills and deep understanding of programming to drive advancements in AI and gain hands-on experience.

## EDUCATION

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**Georgia Institute of Technology, Atlanta, GA:** *B.S. in Computer Science* Aug. 2023 – May 2026  
**GPA:** 4.0/4.0

**Coursework:** Honors Linear Algebra with Abstract Vector Spaces, Introduction to Object Oriented Programming

**Governor Livingston High School, Berkeley Heights, NJ:** *AP Capstone Diploma* Sept. 2019 – June 2023  
**GPA:** 4.76/5.0

**16 APs:** 13 scores of 5, 3 scores of 4

## WORK EXPERIENCE

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**DuckAI:** *AI Researcher and Programmer* Aug. 2023 – Present  
Collecting high quality data to create the future of **Multimodal Generalist Computer Agents**.

- Wrote ComputerTracker desktop application in **Python** for precise computer action collection and playback.
- Upgraded text bounding box extraction with **Azure 4.0 Image Analysis API** for higher quality dataset collection.
- Improved quality and efficiency of data annotation through optimized **Google Colab Notebook** interface.

**Rialtic:** *Junior Machine Learning Researcher* June 2022 – Aug. 2023  
Developed generative AI to produce realistic yet fictional medical records, thus avoiding privacy issues.

- Developed and trained **GPT-2** style **transformer model** with **HuggingFace Transformers**, **PyTorch**, and **Python** to generate fictional medical claim histories from real data. Used **AWS EC2** for GPU compute.

**T20 Prep Academy:** *Python and Java Teacher* June 2023 – Aug. 2023  
Passed programming knowledge on to those younger than me

- Taught middle and high school students **Java** and **Python** programming 6 hrs/week.

**Springfield Senior Housing Inc.:** *Volunteer Lead Backend Programmer* June 2022 – Sept. 2022  
Helped local community by modernizing electronic records for tenant and visitor logging.

- Created a robust **Python** backend system.

**Office of Dr. Ann Jin Qiu, MD:** *Automation Technician* Aug. 2020 – Sept. 2020  
Automated her retirement notifications to thousands of patients, eliminating hundreds of hours manual labour.

- Wrote mass-notification system in **Go** utilizing **Twilio** for phone calls and texts and **AWS SES** for emails.

## PROJECTS

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**Jarvis** Aug. 2023

- Augmented **GPT-4**'s performance in computation-heavy tasks by giving it stateful **Python Jupyter Notebook**, large compute resources, and internet. Implemented **multilingual speech conversation** through **OpenAI Whisper**, **voice activation detection model**, and **Google TTS**.

**Causal Transformer** July 2023

- Wrote causal transformer using **PyTorch** and **Python**. Trained and evaluated on works of Shakespeare. Displayed typical transformer scaling laws.

**Hardware Minesweeper** July 2021 – Aug. 2021

- Built first playable clone of original Microsoft Minesweeper out of **logic gates** in 3D circuit simulator.

**8-bit Programmable Computer** Dec. 2018 – June 2019

- Developed fully programmable 8-bit computer using only **logic gates** in 3D circuit simulator. Can calculate Fibonacci sequence and output to **BCD display**.

## SKILLS & INTERESTS

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**Languages:** Python (Highly Proficient), Rust (Proficient), Go (Proficient), Java (Intermediate)

**Tools:** Git, SSH, Linux, Docker, AWS, VS Code, Android Studio, HuggingFace Transformers, PyTorch, GPT-4

**Interests:** AI, Deep Learning, Programming Language & Compilers, Digital Logic, BJJ, Piano, Ping Pong, Minecraft