

Anthony Wong

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Education

Georgia Institute of Technology
B.S. & M.S. in Computer Science

Atlanta, GA

August 2020 – December 2024 (Expected)

- **B.S. Concentration:** Intelligence and Info Internetworks (Machine Learning and Computer Networking)
- **M.S. Concentration:** Machine Learning
- **B.S. GPA (to be completed December 2023):** 3.96/4.0
- **Coursework:** System Design, Computer Systems & Networking, AI, Database Systems, Robotics & Perception, Design & Analysis of Algorithms, Machine Learning, Deep Learning, Information Security, Big Data Systems & Analytics

Work Experience

Salesforce

San Francisco, CA

Software Engineer Intern

May 2023 – August 2023

- Merged new *Java* code and created new functionality in Salesforce's core platform to resolve the well-known Multi-Select Picklist issue, resulting in an enhanced user experience and fulfillment of customer feedback and asks.
- Enforced test-driven development by utilizing Selenium for UI tests and functional tests on various user interface changes, ensuring robust quality assurance for client-facing modifications.
- Worked to support and innovate on platform data model that underlies the fundamental functionality of Salesforce Customer 360, their main product.

General Motors

Warren, MI

Big Data Analytics Intern

May 2022 – August 2022

- Leveraged *SQL* to wrangle data from data lakes housed in a *Hadoop* environment for the eventual visualization on a *PowerBI* frontend.
- Designed and implemented a database schema model in *PowerBI* to generate reports that were used to drive continual cost-savings and helped the team meet sustainability goals for the quarter.
- Generated elegant *PowerBI* reports based on retrieved data and presented them to engineering and finance teams to aid in decision-making in pursuit of lower costs and GM's zero emissions initiative.

Georgia Tech Research Institute

Atlanta, GA

Electronic Systems Integration Intern

May 2021 – August 2021

- Constructed dynamic GUIs using *C#* to help test military hardware communication systems.
- Designed a system involving *UDP* capable *C#* programs and a singleton broker to simulate status communication systems within various aircraft.
- Automated code validation and deployment by developing unit tests, creating *Jenkins* scripts, and installing *Jenkins* pipelines.

Projects

LEENet: Learned Early Exit Network

August 2023 – Present

- Conceived of a novel Deep Neural Network architecture that uses the existing concept of early exiting to improve the efficiency of existing pretrained networks, such as ResNet, DenseNet, VGG, etc.
- Leveraged the Torch ML framework to implement a model wrapper that allows a neural network to use early exiting, along with a custom loss function that weighs accuracy against computational savings
- One of our many results show a 25% time savings with a 5% accuracy drop on ResNet50 trained on ImageNetTE
- The current plan is to publish our results after running more comparison studies with our results and previous work

Rogue's Gallery (Post-Moore Computing) (Georgia Tech Vertically Integrated Project)

January 2022 – June 2023

- Investigating neuromorphic computing methods for applications in low power autonomous vehicles to reduce power consumption by 90%.
- Classified EEG data of body part activation via spiking neural networks (SNNs) implemented on a low-power FPGA to see if this technology could be used in the realm of prosthetics.
- Working on qualifying scenarios (scenarios currently from OpenAIGym) where neuromorphic algorithms perform better than their non-neuromorphic counterparts.

Activities/Leadership

- **Teaching Assistant for CS4510 (Complexity and Automata)**
- **Vice President of Learning & Development and Marketing Chair for Big Data Big Impact at Georgia Tech**
- **College Coach at WeAdmit Technologies**

Skills

Programming: Python, Java, SQL, C, JavaScript, C#, HTML/CSS, LabVIEW

Tools/Concepts: Jenkins, Jupyter, ReactJS, Django, Flask, Socket Programming, Atlassian Suite, Git, Perforce, Agile Methodologies, PowerBI, Docker, AWS, VSCode, IntelliJ, MySQL, Apache Hadoop, Apache Spark