

Education

Georgia Institute of Technology

B.S. in Computer Science and Mathematics, GPA 4.0 / 4.0

Atlanta, GA

August 2019 - May 2023

- **Concentration:** Intelligence and Information-Inter networks
- **Coursework:** Deep Learning, Computer Systems and Networks, Database System Implementation

Work Experience

Systems Neural Engineering Lab

Undergraduate Research Assistant

Atlanta, GA

January 2020 - December 2020

- Developed and built control systems for conducting tests and recording data from rodent trials.
- Developed a custom data structure for neural data in Python from Pandas and visualization using MATLAB.
- Implemented and troubleshooted control systems to increase testing capabilities by 100%.

Children's Book Illustrator

Freelance Children's Book Illustrator

Atlanta, GA

January 2020 - Present

- Published a children's novel in 2020, currently working on illustrations for a new novel.

Projects

Reviewr

October 2021 - Present

- Co-founded a company that aims to address the problem of sparse reviews for retailers.
- Created a backend server in Flask that scrapes reviews from target websites.
- Currently deploying the service to AWS and implementing a database solution for caching.
- Created a front end applications for chrome in React.

Style Transfer Visualizer

October 2021 - Present

- Implemented the Neural Style Transfer algorithm from the paper from Gatys et al.
- Developed in Tensorflow and Keras to create a merged image from a two images for content and style respectively.
- Working on creating an application that allows for easy layer visualization using saliency maps and GradCAM.

Exploratory Video Database - Feature Extraction and Matching

August 2021 - December 2021

- Added functions to the Exploratory Video Database repository for video feature extraction and matching.
- Used a VGG16 model to extract feature vectors to be compared with other features.
- Used Facebook's FAISS library to index and search for similar vectors in an optimized way.

Hurricane Prediction

July 2021 - August 2021

- Created a hurricane prediction model for the graduate machine learning course.
- Compared machine learning methods such as KNN, SVM, Random Forest, etc on Atlantic Hurricane data set.
- Utilized the Keras API to create a model using LSTMs to predict hurricane trajectories.

Farming Game

August 2020 - December 2020

- Created a farming game for the objects and design course.
- Developed a desktop application using Java and JavaFX for the graphical user interface.
- Lead a team of five in conducting code review and managing git requests.

Extracurriculars and Awards

The Agency

January 2021 - Present

The AI/ML club at Georgia Tech. Currently working as a team lead in utilizing transformers for market data prediction.

Arts in Health Volunteer

January 2020 - March 2020

Arts volunteer for patients undergoing chemotherapy. Received 100% positive feedback from participants.

KASF Scholarship

August 2019

Korean American Scholarship recipient and speaker for outstanding essay.

Skills

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|--------------|---|
| Languages | Python, C++, C, Javascript, SQL, Java, HTML |
| Technologies | Git, Linux, React, Node.js, Express, Flask, AWS |
| Interests | Machine Learning, Deep Learning, Mathematics, Art |