+1(404) 642-1458
soohoonchoi@gmail.com
US Permanent Resident

soohoonchoi.com
linkedin.com/soohoonchoi
github.com/schoi98

SooHoon Choi

Education

Georgia Institute of Technology — Atlanta, GA
B.S. in Computer Science and Mathematics, GPA 4.0 / 4.0 — *August 2019 - May 2023*
- **Concentration**: Intelligence and Information-Internetworks, General Mathematics
- **Coursework**: Computer Systems and Networks, Database System Implementation, Deep Learning, Complex Analysis

Georgia Institute of Technology — Atlanta, GA
M.S. in Computer Science: Machine Learning — *August 2023 - May 2024*

Work Experience

Microsoft — Redmond, WA
Software Engineering Intern, Dataverse — *May 2022 - July 2022*
- Created an end to end resource management service that aimed to optimize virtual machine provisioning.
- Created a data pipeline through Azure Data Factory and develped an automated a machine learning training and deployment pipeline with the Azure ML SDK.
- Wrote an API using ASP.NET with service to service authentication to integrate with existing services.
- Provided data driven capacity values that reduced up to 40% of unnecessarily provisioned virtual machines.

Tabnam — Atlanta, GA
Co-Founder — *October 2021 - Present*
- Co-founded a company that provides an AI-powered shopping assistant through aggregated user experience data.
- Designed and implemented the back-end system using various AWS services (Lambda, DynamoDB, API gateway, etc).
- Currently in charge of developing a CI/CD pipeline process using Terraform and Github actions.

Undergraduate Teaching Assistant — Atlanta, GA
CS 4476 - Computer Vision — *July 2022 - Present*
- Incoming teaching assistant for the computer vision class for undergraduate and graduate students.

Systems Neural Engineering Lab — Atlanta, GA
Undergraduate Research Assistant — *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.

Projects

Lox Interpreter Python — *October 2021 - Present*
- Implemented a toy interpreter from the Crafting Interpreters book by Robert Nystrom
- Focused on parts for parsing plain text code into abstract syntax trees to then evaluate the generated statements.
- Working on implementing additional features such as arrays, indexing, additional operators, and more.

Style Transfer Visualizer — *October 2021 - Present*
- Implemented the Neural Style Transfer algorithm from the paper from Gatsby et al.
- Developed in Tensorflow and Keras to create a merged image from a two images for content and style respectively.

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.

Extracurriculars and Awards

The Inventure Prize	One of six finalists out of 100+ teams. Featured on Georgia Public Broadcast.
Klaus Startup Challenge	Won the first place prize of an investment of $100,000 for my team's company.
The Agency	AI/ML club. Led discussions on current/interesting research papers (GPT-3, DQN, etc.).
Dependently Typed	Programming languages club. Helped organized and develop projects for hackathons.

Skills

Languages	Python, C++, C, Javascript, C#, SQL, Java, Haskell
Technologies	Git, Linux, AWS, Azure, React, Node.js, Express, Django, Flask
Interests	Machine Learning, Deep Learning, Philosophy, Mathematics, Art