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

SooHoon Choi

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

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, Quantum Computation

Georgia Institute of Technology

Atlanta, GA

M.S. in Computer Science

August 2023 - May 2024

• Enrolled in the 5 year Bachelors and Masters program for computer science, specializing in Machine Learning.

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 developed an automated machine learning model training and deployment pipeline with Azure ML SDK.
- Wrote an API using ASP.NET with service to service authentication and integrated it with existing services.
- Provided data driven capacity values that reduced up to 40% of unnecessarily provisioned virtual machines.

Tabnam Atlanta, GA

 $Co ext{-}Founder$

October 2021 - Present

- Co-founded a company that provides an AI-powered shopping assistant through aggregated user experience data.
- Designed and implemented the backend system using various AWS services (Lambda, DynamoDB, API gateway, etc).
- Leveraged Infrastructure as Code tools such as Terraform to increase maintainability and development output.
- Currently leading teams in backend engineering and MLOps to refactor code and create reusable pipelines.

Undergraduate Teaching Assistant

Atlanta, GA

CS 4476 - Computer Vision

July 2022 - Present

- Teaching assistant for the undergraduate and graduate computer vision course of 400+ students.
- Developed and tested projects while holding weekly office hours explaining topics on computer vision and debugging code.

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 - January 2022

- 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.
- Worked on implementing additional features such as arrays, indexing, additional operators, and more.

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 Klaus Startup Challenge One of six finalists out of 100+ teams. Featured on Georgia Public Broadcast. Won the first place prize of an investment of \$100,000 for my team's company.

The Agency Dependently Typed AI/ML club. Led discussions on current/interesting research papers (GPT-3, DQN, etc.). Programming languages club. Helped organized and develop projects for hackathons.

Skills

Languages Technologies Python, C++, C, Javascript, C#, SQL, Assembly, Java, Haskell

gies Git, Linux, AWS, Azure, Terraform, React, Node.js, Express, Django, Flask

Interests Machine Learning, Deep Learning, Computer Systems, Mathematics, Philosophy, Art (@soohoon.art)