

SooHoon Choi

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, General Mathematics
- **Coursework:** Computer Systems and Networks, Database System Implementation, Deep Learning, Quantum Computation

Georgia Institute of Technology

M.S. in Computer Science

Atlanta, GA

August 2023 - May 2024

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

Work Experience

Microsoft

Software Engineering Intern, Dataverse

Redmond, WA

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 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

Co-Founder

Atlanta, GA

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).
- Leveraged Infrastructure as Code tools such as Terraform to increase maintainability and development output.

Undergraduate Teaching Assistant

CS 4476 - Computer Vision

Atlanta, GA

July 2022 - Present

- Teaching assistant for the Undergraduate and Graduate computer vision course of 400+ students.
- Helped lead develop and test projects while holding weekly office hours that provided help to additional students.

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.

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

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, Terraform, React, Node.js, Express, Django, Flask

Interests

Machine Learning, Deep Learning, Computer Systems, Philosophy, Mathematics, Art