

## EDUCATION

### University of Virginia

**Masters in Computer Science (2020)**  
Cumulative GPA – 3.82

**B.A. in Computer Science (2019)**  
Major GPA – 4.0

### Relevant Coursework

Vision and Language  
Design and Analysis of Algorithms  
Computer Architecture and Design  
Data Mining  
Deep Learning for Visual Recognition  
Machine Learning  
Advanced Embedded Systems  
Software Security  
Software Engineering for Robotics  
Computer Graphics  
Computer Vision  
Mobile Application Development  
Computer Game Design  
Defense Against the Dark Arts  
Information Retrieval  
Computer Networks  
PL for Web Applications  
Algorithms

### Skillssets

Java	MongoDB
Typescript	Win32
C + +	Unity
C#	Numpy
Python	Pytorch
	Scikit-learn
React	IAM
npm	S3
vtk.js	Athena

English	Korean
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## LEADERSHIP

**KSEA Central Virginia YG Chapter**  
– Chapter President of KSEA in UVA.

**ACM at UVA**  
– School representative in the regional round for ICPC 2016

## WORK EXPERIENCE

### Imagoworks (Seoul, Korea)

Software Engineer (2023 – Current)

- Built AI-driven 3D dental web solutions such as Dentbird Crown and Dentbird Studio using Typescript React, vtk.js, and C + +.
- Created interactive 3D components and features for the web, enabling users to manipulate and visualize dental structures effectively.

### Fasoo (Seoul, Korea)

Software Engineer (2021 – 2023)

- Developed and maintaining windows libraries for the Fasoo Enterprise DRM Product
- Worked with Windows API for tasks such as shell development using both C + + and C#

### University of Virginia (Virginia, US)

Teacher Assistant (2016 – 2020)

- Worked as a teacher assistant for Digital Logic Design and Computer Architecture with high understanding of topics: sequential network design, ISA and hardware implementation of the memory system and virtual memory.

### Amazon (Seattle, US)

Software Engineer Intern [EMR Team] (2019 Summer)

- Implemented an automated service combining multiple Amazon APIs to replace a manual workflow in dealing with Trouble Tickets, relieving the task of engineers responsible for the tickets.

Software Engineer Intern [IAM Team] (2018 Summer)

- Reduced a week of work to just a few minutes by developing an automated IAM Policy Scan tool that implements AWS services such as Amazon Athena and S3 into a Ruby on Rails website.

### Fasoo (Seoul, Korea)

Software Engineer Intern (2016 Summer)

- Developed a custom web crawler that identifies websites containing vulnerability related source codes and categorizes them by vulnerability type based on the list provided by CVE

## Projects

### CLASS Analytics

(2021 – Current)

- Developed a education service that helps instructors with class management modules and test generation function for their courses.
- Designed an embedding layer for LLM models to utilize in making new questions for all subjects by scrapping existing questions from databases and online resources for ingestion (RAG)

### Flutter Application Development

(2020 – Current)

- Developed and released multiple open-source applications of various purposes including budget manager, workout tracker, and a gallery app using the Flutter Framework.

### Machine Learning Projects

Paintings and Language (2020 Fall)

- Explored different models of image-text pair generation with the MET database using neural network models such as GAN and LSTM.

Research Reproduction (2019 Fall)

- A reproduction of the newest research paper "Escaping Saddles with Stochastic Gradients" was done to explore new techniques in the machine learning field