

Hongyi Suh

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Related Link: <https://github.com/Hongyi>

<https://hongyi.github.io/>

PROFESSIONAL OBJECTIVE

Graduated in Bachelor of Science in computer science and a Minor in Mathematics. Interested in the Artificial intelligence area and other computer science parts as well. Participated in various departmental activities, and as an executive, had a strong responsibility for the group and experienced good communication with people. Experienced in Artificial intelligence projects and other relevant computer science projects. Looking for a position in artificial intelligence research or other relevant software work.

EDUCATIONAL QUALIFICATION

Bachelor's Degree Major (CS&CSE) Computer Science & Minor in Mathematics,
Oregon State University, Corvallis, OR, 2018 - 2022

SKILLS

Technical Skills	Skillful in Python and C++ Good in Java, SQL, JAVA, and C Understanding well in Tensorflow, Keras, Artificial intelligence algorithms (CNN, RNN, DS-CNN)
Management Skills	Powerful Teamwork skills Good communication with the team and people. With professional project management knowledge, very well managing team and project.

EDUCATIONAL EXPERIENCE

Course work (CS 290)

Oregon State University, Corvallis, OR, US 2020

Final project (A): Web development for an application for providing food recipes

Description: Develop a website for searching the recipe and including a log-in system to save personal information and data.

Achievement: Class grade A, Teamwork, implementing SQL back-end and front-end

Role: Design general architect structures. Back-end (Server side, management log-in system, and maintenance user data permanently using MySQL), Front-end, testing application user experiment point of view.

Project Management Method: Agile Approach

Contributor: Hongyi Suh, HJ.S, KH.K

Link: <https://github.com/osu-cs290-f19/final-project-group-13>

Course work (CS 492)

Oregon State University, Corvallis, OR, US 2021

Final project (A): Mobile development: movie application

Description: Searching movie charts and giving movie information to users in the live system. Using API to insert movie trailers in mobile applications.

Achievement: Class grade A, experienced Android system back-end and front-end

Role: Back-end (Built-in server structures, using SQLite to save user personal collections and favorite movies. Using API extracting movie data) Front-end (Architecture Design)

Project Management Method: Waterfall Approach

Contributor: Hongyi Suh, HJ.S, KH.K

Link: <https://github.com/osu-cs492-w21/final-project-team-11>

Course work (CS 434)

Oregon State University, Corvallis, OR, US 2021

MACHINE LEARNING & DATA MINING

Description: Learning Machine learning and data mining with large scale data set

Achievement: Implemented KNN algorithm and HOG fast image classification with Kaggle competitions to get high accuracy.

Final Competition rank: Top 10%

Self-Motivating Study (Deep Learning and AI) Organized Study Group, Corvallis, OR, US 2021

Study topic to deeply understand Artificial intelligence – KWS (Keyword Spotting)

Purpose and Target: Analysis and Implementing KWS with pure Python code.

Description: Implement KWS Neural Network System including MFCC, DS-CNN with pure python code. Training NN under reinforcement method using Google Speech Data Set and testing the system accuracy.

Achievement: After experimenting of DS-CNN, which is better than the original CNN, and reduced the time complexity (approximately 1/9), Understanding the MFCC algorithm to use sound data.

Role: Lead the team management, built-in program algorithm as DS-CNN

Project Management Method: Agile Approach

Contributor: Hongyi Suh, HJ.S, KH.K

Link: https://github.com/Hongyiel/KWSproject_python

Capstone Project: Oregon State University, Corvallis, OR, US 2021 ~ 2022.06.10

Artificial intelligence, Implementation of Machine Learning based 3D Reconstruction of in-door

Description: Scanning old floor plan digitally and analyzing data to understand machines in distinguishing location of the door, window, wall, closed wall, and others.

Achievement: Understand Machine Learning packages (Tensorflow, Keras, Pytorch, and others)

Role: Scrum Leader (management team), a project with the manager, develop program algorithms with Tensorflow and Keras, make TFrecord and design architecture.

Project Management Method: Agile Approach

Project Advisor (Manager): Steven, Katie of *Autodesk Co. Ltd*

Contributor: Hongyiel Suh, Qi Xu, Matthew Peterkort, Tuong Minh Nguyen Huy

Link: <https://github.com/yuanyuanmai/DeepNeuronFloorplan>

Hackathon Team Project: DevPost from Oregon State University 2022

Hackathon, using Data and extract Covid19 data from Python flask

Description: Letting people feel the alertness by providing current covid-19 related data.

Achievement: Learned Python Flask, Fluency API data usage to extract Covid-19 Data.

Role: Front-end (Design Architecture) Back-end (API data extractions)

Project Management Method: Agile Approach

Contributor: YS Cho, Hongyiel Suh, HJ Lim, DW Kang

Link:

https://devpost.com/software/data_hack_covid-19?ref_content=my-projects-tab&ref_feature=my_projects

ACTIVITIES & EXPERIENCE

MediaZen. Co, **Intern**

- Analysis Biodata (Bioinformatics) with machine learning, find relevant between anemia and rare diseases. Using NN and Transformer.

57, Dongsomun-ro,
Seongbuk-gu, Seoul, Republic
of Korea
09/30/2022 - current

Artificial intelligence Club, **Member**

Corvallis, OR, US 2021 ~
2022

Artificial intelligence Club, **Officer Secretary**

Corvallis, OR, US 2022/01 ~
2022/06

Korean Student Association, **Lead Officer & Treasurer**

- Introducing Korean cultures. And manage financial

Corvallis, OR, US 2021

data for this association. Also, led the general events and officers of this association.

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|--------------------------------------------------------|-------------------------------|
| Kaggle Competition Experience, Top 10% | Corvallis, OR, US 2021 Spring |
| - Machine learning Kaggle Competition during the class | |
| Korean Student Association, Treasurer | Corvallis, OR, US 2020 |
| - Manage financial data for this association. | |

AWARDS & Scholarship

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|------------------------------------------------|---------------------------------|
| International Student Continuation Scholarship | Oregon State University, 2021 ~ |
| - Amount: \$ 7500 | 2022 |

ADDITIONAL WORK

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| Military Service, Capital Defense Command | Seoul, Korea 2016 ~ |
| - Capital Defense Command Electronic Maintenance Information System Engineer | 2018 |
| Ferry Sewol Victims of the accident volunteering at the joint memorial altar in Gwanak-gu | Gwanak-gu Office Square, Gwanak-gu, Seoul, KR 05. 17. 2014 |
| INTO University partnership Volunteer | Corvallis, OR, US 2019 |
| - New International Student Orientation (ISO) Summer 2019, Guide students who are new students on the OSU Corvallis | |

Relevant Coursework

Web development, Data structures, Computer Architecture & Assembly language, Operating system, Database, Usability engineering, C language (OS), Analysis of Algorithms, Software Engineering, Computer Networks, Artificial intelligence, Machine learning

Linear Algebra, Numerical Analysis, Differential Calculus, Integral Calculus, Infinite series and sequences, Vector Calculus, Series, Statistics.