Hongyiel Suh

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Related Link: **https://github.com/Hongyiel**

https://hongyiel.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: Hongyiel 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: Hongyiel 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: Hongyiel 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 Architectures) 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

EDUCATION ACTIVITIES & EXPERIENCE

Korean Student Association, **Treasurer**   Corvallis, OR, US 2020
   -   Manage financial data for this association.

Kaggle Competition Experience, **Top 10%**   Corvallis, OR, US 2021 Spring
   -   Machine learning Kaggle Competition during the class

Korean Student Association, **Lead Officer & Treasurer**   Corvallis, OR, US 2021
   -   Introducing Korean cultures. And manage financial
       data for this association. Also, led the general events
       and officers of this association.

Artificial intelligence Club, **Officer Secretary**   Corvallis, OR, US 2022/01 ~
                                                2022/06

Artificial intelligence Club, **Member**   Corvallis, OR, US 2021 ~
                                                                              2022

AWARDS & Scholarship

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

ADDITIONAL WORK

Military Service, Capital Defense Command   Seoul, Korea 2016 ~
  -   Capital Defense Command Electronic   2018
      Maintenance Information System Engineer

Ferry Sewol Victims of the accident volunteering   Gwanak-gu Office Square, Gwanak-gu,
at the joint memorial altar in 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.