

Junhyeok Jeong

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EDUCATION

Oregon State University

Honors Bachelor of Science in Computer Science, Minor in Mathematics, 3.88 GPA

Corvallis, OR

Sep. 2017 – June 2021

EXPERIENCE

Undergraduate Research Assistant

Nov. 2019 – Present

Oregon State University

Corvallis, OR

- Implemented computer vision with OpenCV, PyTorch and Mujoco robotics as an undergraduate research assistant in the Dr. Cindy Grimm's grasping robot research team
- Explored Object Detection frameworks(YOLOv3, Mask R-CNN) and reached average 89% accuracy on detecting 3D-printed shapes

Office Assistant

June. 2018 – Sep. 2018

IMG Advertising Company

Seoul, South Korea

- Assisted data manipulation with Microsoft Excel and documentary translation from Korean to English

Firearms repair technician SGT.

Jan. 2015 – Nov. 2016

Republic of Korea Army

Seoul, South Korea

- Developed leadership and teamwork as a squad leader
- learned about communication skills with boss, and how to work efficiently for own my tasks

PROJECTS

Interactive Visualization for AI Education | Javascript, React, Tensorflow, Keras

Sep. 2020 – Present

- Designed and developed a web-based interactive visualization tool for novices to learn about AI or machine learning with various models
- Generated various visualization features like confusion matrix, accuracy changes, feature extractions, and connections across layers of AI model

Teachable Machine | Javascript, TensorflowJS, NodeJS

March 2020 – Sep. 2020

- Developed web-based tool that makes creating machine learning classification models fast, easy, and accessible to everyone
- Implemented Knn classifier and Neural Network with TensorflowJS API and it shows over 90% accuracy for each class with at least 10 images from a user

Object Detection for Grasping Robot | Python, OpenCV, Tensorflow, Mujoco, ROS

Nov. 2019 – Present

- Implemented YOLOv3 with camera sensors to detect object for the grasping robot arm. It reached 89% accuracy for each 3D-printed shape like sphere, cylinder, cone, and cuboid
- With ultrasonic sensor on Arduino board, learned about camera matrix to get height, width, and coordinates of the detected object

Online Bookstore Development | Python, Flask, HTML/CSS, MySQL

April 2019 – June 2019

- Developed a online bookstore with MariaDB to learn about frontend and backend communication
- Implemented Python Flask to host database server and to manage item stocks on the bookstore

Data Visualization with Unreal Engine 4 | Python, Unreal Engine 4

Jan. 2019 – July 2019

- Implemented a data visualization which converts from csv data to virtual world of Unreal Engine 4
- Explored Unreal Engine 4 to learn about AR/VR and data visualization

TECHNICAL SKILLS

Languages: Python, C/C++, MySQL, JavaScript, HTML/CSS, Unreal Engine 4, CUDA

Frameworks: Keras, Tensorflow, PyTorch, Node.js, Flask, React

Developer Tools: Git, Google Cloud Platform, VS Code, Visual Studio, PyCharm, Android Studio, Flutter

ACTIVITIES

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| 2019 Summer Undergraduate Research Symposium | Sep. 2019 |
| <ul style="list-style-type: none">• Presented URSA research poster (data analysis and visualization with Unreal Engine) at 2019 Summer Undergraduate Research Symposium | |
| Honors College Leadership Challenge Course | Sep. 2018 |
| <ul style="list-style-type: none">• Built teamwork skills by attending Honors College Leadership Challenge Course at OSU | |
| Intel Oregon FIRST LEGO League | Dec. 2017 |
| <ul style="list-style-type: none">• Supported the league progress and participants as a student volunteer | |