

Woosang (Paul) Kang

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EDUCATION

Cornell University, College of Engineering

Bachelor of Science in Computer Science; GPA: 3.914

Ithaca, NY

Expected May 2023

EXPERIENCE

Freelance Web Developer

Travel dNation

Seoul, Korea

Jan 2020 - Apr 2020

- Developed a responsive web app MVP for a novel tourism service based on using Node.js, Heroku, and Firebase
- Reduced average payload size up to 30% and response time by implementing pagination through query cursors
- Presented the product at major Korean airline companies (Korean Air & JinAir) for investment

Desk Sergeant, Military Police

Korean Augmentation to the U.S. Army

Dongducheon, Korea

Aug 2018 - Apr 2020

- Performed Korean-English translation and event organization between the U.S. Army Military Police, Korean National Police, and Dongducheon District Court in professional diplomatic settings
- Completed service as a sergeant & leader of a section of 20+ members, received specialized joint training in multiple fields, covering the UCMJ, Taser certification, self-defense, and more

Team Member

Bridge to Prosperity

Ithaca, NY

Aug 2017 - Jan 2018

- Completed in-depth sessions on 3D design & printing using SketchUp along with multiple classes on hands-on application of mechanics for devising a construction plan for a functional bridge in Mbabane, Swaziland in 2019
- Contributed to the concept design of the team's official website through Figma sketches

PROJECTS

Virtual Learning Platform

- Implemented the custom user profile, email verification and tutor-student reservation system of a virtual tutoring service using Django, PostgreSQL, Docker and AWS S3 as a backend developer in a 4-member team
- Won 1st place in the Virtual Learning Category at HackOurCampus hackathon out of 200+ participants
- Currently under progress of implementing planned features, including a credit-based payment system and Zoom/Calendly API integration under the mentorship of the hackathon panel throughout the semester

V's Pick - Mobile Application

- Developed a mobile Location Based Service for curated vegan restaurants in Seoul using Expo, ReactJS, Firebase, and Docker as the lead developer in a 4-member team
- Implemented admin features with Firebase cloud functions to verify user-submitted restaurant updates and analyze posting patterns of individual users to prevent spamming activities or fraudulent reviews

Island Classification API

- Trained a multi-class image classification neural network (ResNet) using custom created dataset on local islands
- Deployed the trained model (TorchScript) by creating an API through provisioning AWS SAM, API Gateway, S3 along with a custom PyTorch Lambda layer (currently transferred to TorchServe)

Space Game

- Designed the core informed search algorithm for python based spaceship game by implementing A* search with customized heuristic function using SLD
- Ranked 17 out of 200+ submissions in the final project evaluation on both average runtime and retrieval score

ACHIEVEMENTS

Dean's List, College of Engineering

Fall 2017, Spring 2018

PROGRAMMING SKILLS

Languages: Python, JavaScript, Java, TypeScript, C++, SQL, LaTeX

Web/Mobile: React, React Native, Node.js, Express.js, Expo, HTML, CSS, Bootstrap

Database/Cloud: Firebase, MongoDB, PostgreSQL, AWS(Lambda, EC2, S3, API Gateway), Docker