

Taoyuan Wang

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EXPERIENCE

Software Engineer in Appen

Apr 2019 – Present

Computer Vision Tools Team

Sunnyvale, CA (Shanghai til Jan 2020)

- Built for China systems to support local market (assist in setting up new branch office in China as first engineer)
- Led to design and develop annotation platforms for 3D model and pointcloud (frontend with React and Three.js, backend with Flask and Spring)
- Extended pointcloud cuboid annotation to semantics segmentation as side project then got accepted as a new product (got 20+ top customers in autonomous vehicle and robot industries)
- Researched on pointcloud object detection/tracking and used opensource projects to increase annotation efficiency
- Conducted sensor fusion experiments based on client device parameters (e.g. LiDAR/camera position, rotation, focal length, etc) with NumPy to project points from 3D to 2D domain
- Implemented event logger and worked with data scientists to analyze behavior of annotators for training process and tools improvement (Reduce annotation cost by 56%)

Software Engineer in Works Applications

Apr 2018 – Mar 2019

AI WORKS HUE Tech Lead Group

Shanghai, China

- Developed product frontend with Vue.js
- Developed product backend with Spring, Hibernate and JUnit

Research Assistant in Academia Sinica

Dec 2017 – Mar 2018

Natural Language Processing Lab

Taipei, Taiwan

- Researched on Chinese Short Text Conversation chatbot
- Implemented sequence to sequence models with PyTorch
- Maintained a large repository of post-comment pairs from Weibo datasets
- Used appropriateness scores of comments as reward for reinforcement learning

EDUCATION

Carnegie Mellon University

Remote

M.S. in Software Engineering(Intro to Machine Learning for Engineers, Building Reliable Distributed Systems)Fall 2020

Nagoya University

Nagoya, Japan

Academic Exchange to Database Lab (Full Japanese immersion)

Oct 2014 – Jul 2015

Tsinghua University

Beijing, China

Development of Mobile User Sensing System with Android and Servlet/JSP

Aug 2012 – Sep 2012

National Tsing Hua University

Hsinchu, Taiwan

B.S. and M.S. (Internet Lab) in Computer Science

Sep 2010 – Aug 2016

PROJECTS

Midnight Radio | PHP

Sep 2015 – Aug 2016

- Developed a platform to share music, lyrics, and pictures with friends
- Simulated radio-like live streaming only with synchronization logic

Watchdog | Python

Oct 2014 – Aug 2016

- Developed a Raspberry Pi remote-control webcam to monitor my pet when I'm far from home
- Designed web UI for controlling servo motors to change the view of webcam
- Auto-checked server status and restarted system if no response from device to minimize maintenance

Boki | Android

Oct 2014 – Jul 2015

- Developed an accounting app with budget control, spend analysis, currency conversion for my studying in Japan

SKILLS

Languages: Python, JavaScript, Java, C/C++

Frameworks: Flask, React/Redux, Spring, JUnit, Jest, pytest

Developer Tools: Git, Docker, Jenkins, Jupyter Notebook, PyCharm, WebStorm, IntelliJ IDEA

Libraries: NumPy and WebGL using Three.js for 3D data visualization