Michael Wu

wuxiaohua1011@gmail.com | 626.417.5982

EXPERIENCE

GENERAL MOTOR | EXCEL Intern

June 2020 – Aug 2020, May 2021 - Aug 2021 | Detroit, MI (work from home)

- Vehicle to Cloud infrastructure data analysis, logging, and monitoring using ELK, Jenkins, Artifactory, and various tools
- Investigated Carla and Autoware integration with GM Research
- HVAC environment analysis and software development

BERKELEY FHL VIVE CENTER FOR ENHANCED REALITY | Undergraduate Researcher

Sep 2018 – Present | Berkeley, CA

- Published paper Affordance Analysis of Virtual and Augmented Reality Mediated Communication.
- Developed ATLAS Annotation Tool, a software for point cloud annotation and providing semantic meaning.
- Robot Open Autonomous Racing (ROAR) software architect and core development team lead. Enabled 40+ Undergraduate and Graduate students to apply their thesis on.
- Head Robot Autonomous Driving DeCal course facilitator

LAWRENCE BERKELEY NATIONAL LABORATORY | Intern

Sep 2018 – Present | Berkeley, CA

- Implementing and consuming OPTiMaDe API in Python, compliant with the JSON API 1.0 spec, enabling Interoperability among databases. Designed query parsing pipline and custom parsing syntax.
- Design and implemented dynamically extensible endpoint framework for Materials Project
- Re-design and implemented MPCite, an automated, fail-safe, large-volumn pipeline that cooperate with the US Department of Energy, Office of Scientific and Technical Information for automatic DOI generation and synchronization
- Integrated fail-safe, monitor free pipeline for database synchronization with Google and NOMAD

OSAKA UNIVERSITY FRONTIER LAB | Student Researcher

June 2019 – Aug 2019 | Osaka, Japan

- Investigated mono-camera depth sensing with object tracking and applied result on Laparoscopic Bipolar Forceps Positioning in Stereo Video for Robotic Surgery Training. Paper and code available upon request

OPTI-WIFI | Intern

June 2018 – Aug 2018 | Dublin, Ireland

- Real-time WLAN data visualization, for WLAN Channel availability, bandwidth, access point location, and etc.
- Automated database update procedure and increased database query efficiency by 25% using PHP and Python

PROJECTS

KIKAROO | Hackathon Project

Jan 28, 2018

- First place in the ISPE Hackathon. Invented baby kick anomaly detector with capacitive pads and simulated results.

EDUCATION

UNIVERSITY OF CALIFORNIA, BERKELEY | B.A. in CS, M.S. in EECS

Expected Graduation: 2022 | Berkeley, CA •

Core Classes: Data Structure • Algorithm • Computer Architecture • Database • AI • Machine Learning • Internet Protocol • Computer Security • Techniques of Data Sciences • Advanced Robotics • Vehicle Dynamics • Neural Network Visualization • Deep Reinforcement Learning

OTHER

PROGRAMMING/TOOLS

• Python/Java/C++/others • iOS and Android development • Unity • UE4 • Linux System administration • many more and always learning new things everyday

LINKS

- https://wuxiaohua1011.github.io/
- LinkedIn: michael-wu-50417610a
- Github: wuxiaohua1011