Michael Wu

wuxiaohua1011@berkeley.edu | 626.417.5982

EXPERIENCE

BERKELEY FHL VIVE CENTER FOR ENHANCED REALITY | Undergraduate Researcher
Sep 2018 – Present | Berkeley, CA
- Planned, designed, and carried out user research to compare conferencing using VR, Skype and hologram. Paper available at https://arxiv.org/abs/1904.04723
- Leading the development of the Atlas Project, a labeling tool for point cloud data, utilizing Open3D, PyQT, VisPy, and various other libraries. In progress, code available upon request.

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. Gihthub: https://github.com/wuxiaohua1011/optimade-python-tools
- Designed query parsing pipline and custom parsing syntax using Lark, and Python-to-MongoDB query translator using PQL
- Renovating and modulating the Materials Project internal framework, using Plotly Dash, FastAPI and other libraries.

OSAKA UNIVERSITY FRONTIER LAB | Student Researcher
June 2019 – Aug 2019 | Osaka, Japan
- Laparoscopic Bipolar Forceps Positioning in Stereo Video for Robotic Surgery Training. Paper available online
- Object tracking and depth information sensing from stereo frames using OpenCV and built DIY stereo Camera for testing
- Github link: https://github.com/wuxiaohua1011/stereo-image-to-point-cloud-japan

OPTI-WIFI | Intern
June 2018 – Aug 2018 | Dublin, Ireland
- Automated database update procedure and increased database query efficiency by 25% using PHP and Python
- Generated WLAN channels visualizations in real-time using Javascript and SQL

PROJECTS

STYLE TRANSFER | Member
Feb 2018
- Mentored project to implement Style Transfer on two images by using TensorFlow and Pytorch, exploring the use of CNN, Gradient Descent, and etc. Github link: https://github.com/wuxiaohua1011/sp18-ulab-computervision

KIKAROO | Team Lead
Jan 28, 2018
- Prototyped a capacitance touch pad that would detect a kick and an Android Application for user interface, place first in the ISPE Hackathon. Github Link: https://github.com/wuxiaohua1011/HackforHumanity2018

EDUCATION

UNIVERSITY OF CALIFORNIA, BERKELEY | B.A. in Computer Science
Expected June 2021 | Berkeley, CA · Cum. GPA: 3.56/4.0
Classes: Data Structure • Discrete Math and Probability • Algorithm • Foundation of Data Science • Web Data Visualization • Computing in Astronomy • Computer Architecture • Design Information Devices and Systems I & II • Intro to Database(In Progress) • Intro to AI(In Progress) • Concepts of Probability(In Progress)

UNIVERSITY OF MICHIGAN, ANN ARBOR | Certification in Leading People and Team
Ross School of Business (Online) | Jan 2016 - April 2016

OTHER

PROGRAMMING/TOOLS
Java • Python • JavaScript • HTML/CSS • MySQL
• PHP • C++ • Bash • Android Studio • Unity • Git
and eager to learn more

LINKS
- https://wuxiaohua1011.github.io/
- LinkedIn: michael-wu-50417610a
- Github: wuxiaohua1011
- Facebook: wu.michael.1420