# Michael Wu

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San Francisco Bay Area (Open to Remote Work)

## EXPERIENCE

**TIKTOK** | Software Engineer
July 2022 – Present | MoutainView, CA
- Development in mobile, security and backend functionalities.

**BERKELEY FHL VIVE CENTER FOR ENHANCED REALITY** | Graduate Researcher
Sep 2018 – July 2022 | Berkeley, CA
- Development of the ROAR autonomous driving platform, serving 90+ undergraduates and 40+ graduate students.
- Experienced with Nvidia Jetson, Arduino, ESP, Intel Realsense, Livox and Velodyne Lidar, RTK GPS, and various components
- Experienced entire stack of autonomous driving motion planning, computer vision, and controls
- Key libraries/technologies: Multi Threading, Networking, Embedded Systems, Obstacle Detection and Tracking, Image Segmentation, ROS/ROS2, OpenCV, Open3D, Tensorflow, PyTorch, UDP/TCP, Websocket

**LAWRENCE BERKELEY NATIONAL LABORATORY** | Software Engineer Intern
Sep 2018 – Sep 2021 | Berkeley, CA
- Implemented OPTiMaDe API in Python, and published to Centre Européen de Calcul Atomique et Moléculaire Conference
- Designed and implemented dynamically extensible endpoint framework for Materials Project. Experience in navigating through large code base
- Refactored MPCite, an automated data pipeline for automatic DOI submission and tracking
- Enabled raw materials calculation data synchronization with Google and NOMAD
- Key technologies: High Performance Computers & clusters, Linux scripting, Web server, Javascript, MongoDB, Google API, Flask, Linux scripting, , Github Actions, Travis CLI, Plotly Dash, Django

**INTELLIGENT RACING INC** | R&D and Software Engineer Contractor
Nov 2020 - Now | Work from Home
- Developed Augmented Reality enabled iOS app for autonomous driving education. Enabled reliable and low-latency data streaming pipeline for decision making on remote host machines
- Key Technologies: ARKit, Apple Pay, Vapor, Network, URLSession, RESTful API, AWS, Heroku, KingSoft ecosystem, PostgreSQL, Google BigQuery,

**GENERAL MOTOR** | Engineering Product Development Intern
June 2020 – Aug 2020, May 2021 - Aug 2021 | Detroit, MI (Work from Home)
- Enabled Vehicle to Cloud logging, and monitoring infrastructure using ELK, Jenkins, Artifactory, and various tools
- Orchestrated Carla and Autoware integration with GM Research
- Optimized HVAC environment analysis and software development with VBA, Matlab, MDA, and various other tools
- Experienced with developing and following program specification, documentation, and CI/CD cycle.

## EDUCATION

**UNIVERSITY OF CALIFORNIA, BERKELEY** | B.A. in CS, M.S. in EECS -m GPA 3.75
Expected Graduation: 2022 | Berkeley, CA ·
Data Structure • Algorithm • Computer Architecture • Database • AI • Machine Learning • Internet Protocol • Computer Security • Data Sciences • Advanced Robotics • Vehicle Dynamics • Neural Network • Deep Reinforcement Learning

## OTHER

**PROGRAMMING/TOOLS**
• Python/Java/C++/GoLang/others • iOS and Android development • Unity • MongoDB/Posgres • node.js • UE4 • Linux System administration • Embedded Systems • Github • many more and learning everyday

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