

# Kevin (Qihua) Yu

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## Experience

### **Northvolt-Cuberg | R&D Battery Test Engineer II** | *San Leandro, CA, Mar 2023 - Present*

- Install, set up, and maintain large battery test equipment, including Neware and Arbin systems.
- Design and prototype next-generation battery test fixtures and tools.
- Utilize Onshape CAD and SolidWorks to create 3D print prototypes for validating proof of concept designs.
- Collaborate with cross-functional teams, such as Module, R&D, and validation teams, to enhance DOE test setups.
- Develop protocol scripts based on electrochemical study results to simulate customer user profiles.
- Work closely with the battery validation team to perform battery characterization tests, including OCV-SOC, High Rate DCIR, and Rate Ladder tests.
- Lead testing of customer profiles, including EVTOL, ECTOL, EV bikes, and EV cars.
- Design and implement a test chamber for lithium metal battery thermal runaway testing under ultra-high temperatures (1000°C-1300°C) and ultra-high pressures.
- Support the documentation process for UL certification.
- Improve safety and abuse test setups, including DAQ, thermal sensors, high-speed cameras, and Neware cyclers.

### **Northvolt-Cuberg | R&D Test Technician, Lead** | *San Leandro, CA Mar 2022 - Mar 2023*

- Assembled battery cells, injected electrolytes, cut pouches, sealed cells, and measured ACIR.
- Managed daily cell logistics and assigned tasks to technicians based on MES.
- Monitored battery test cycling to detect unusual signals and prevent thermal runaway.
- Trained technicians and engineers on high-risk cell handling, new fixture loading, pressure measurement, and SOP activities.
- Created SOPs for battery-related activities, including cell loading, removal, and preparing DPA cells for disposal.
- Implemented 5S methods in the test lab, wet lab, machine shop, and Hazmat room.
- Reported and provided feedback to the EHS team on potential safety concerns.

### **Apple Inc | Career Experience, Accessory Automation QA Lab Technician** | *Cupertino, CA, Jan 2021 - June 2021*

- Designed test cases and user scenarios to validate USB cables, power bricks, battery packs, and wireless Qi charging accessories.
- Captured extensive raw data from electronic analogs and improved the data pipeline.
- Produced a demo video for the WPC Spring Apple presentation, receiving strong positive feedback from the hardware and marketing teams.
- Optimized the automation testing environment and workflows for device provisioning and load & stress testing.
- Generated and reported test results, bugs, and issues within Apple's internal system.
- Enhanced automation settings for efficient firmware update validation.
- Set up testbeds for automation testing, maintained lab equipment, and adjusted Python scripts for various testing scenarios.
- Conducted root cause analysis for automation equipment issues.

### **Apple Inc | Technical Support Specialist (2019 -2021) - Technical Expert (2021-2022)** | *Emeryville, CA, Sep 2019 - Sep 2021*

- Troubleshoot iOS devices to deliver comprehensive solutions for customers.
- Consistently ranked in the top three for service time per customer reservation.
- Early adopter of new products and services within Apple initiatives.
- Maintained expert knowledge of mobile devices and computer hardware and software.
- Demonstrated strong debugging and problem-solving skills for Apple hardware and software.
- Showed excellent attention to detail, time management, and decision-making skills.
- Performed hands-on hardware and software repairs as an Apple Certified iOS technician.
- Provided mentorship and feedback to newly hired technical specialists.

### **AnB Components | Senior Technician** | *Oakland, CA, Aug 2013 - Oct 2015*

- Strong hands-on experiences with hardware repairing and soldering.
- Troubleshooting and repairing software issues with various operating systems such Windows, Mac OS, IOS, Android, and Blackberry.
- Capable quick turn-around time to repair over 30 devices daily: laptop, phone, and other mobile devices.

## Education

### **University of California Berkeley** | *2015-2017*

Bachelor of Arts in Anthropology

## Skills

Analog analysis, Automation testing, Usability testing, Data visualization, Data analysis, Looker, Wireframing, Rapid Prototyping, Information Architecture, Adobe Creative Suite, Sketch, Principle, Figma, Invision, Cinema 4D, HTML, CSS, TypeScript, SOP writing, Protocol Scripting, 3D modeling with CAD, Adurino,