KELLY LUE

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EDUCATION

UNIVERSITY OF CALIFORNIA, IRVINE **SEP 2018 – JUN 2022**

- **B.S. in Electrical Engineering**, specializations in Digital Signal Processing, Communications, and RF Design
- **Cumulative GPA:** 3.87 | **Dean's Honor List for All Quarters**
- **Relevant Coursework:** C++/Advanced C, Digital Systems & Logic, Network Analysis w/ Lab, Discrete Signals & Systems
- **Activities & Organizations:** Solar Car, Science Olympiad at UCI, IEEE Eta Kappa Nu, Campuswide Honors

TECHNICAL EXPERIENCE & PROJECTS

EE SYSTEMS VALIDATION & INTEGRATION INTERN, KARMA AUTOMOTIVE **SEP 2020 – PRESENT**

- Use CANalyzer and create DBC files to help Powertrain, Battery, and Vehicle Integration teams simulate and test ECUs
- Design logical schematics displaying pin-to-pin connections and high-level overview of vehicle circuitry using MS Visio
- Write Python programs for more efficient CAN ID conversion & troubleshoot/maintain software release website using Flask
- Regularly update and review vehicular standards documentation across engineering teams using SharePoint and Polarion

PCB DESIGN, PERSONAL PROJECT **JUL 2020 – SEP 2020**

- Self-learned fundamentals of PCB design through online courses and earned EasyEDA course certification
- Upgraded UCI EECS70LB project to create a PCB version of an AM audio transmitter and amplifier using LM386 IC
- Designed 100-12V buck converter for high-to-low voltage conversion and a USB to TTL converter using the FT232R IC

ELECTRICAL LEAD, UCI SOLAR CAR **MAR 2020 – SEP 2020**

- Used Autodesk EAGLE to design and analyze schematics for high- and low-voltage vehicle safety circuitry
- Conducted quality assurance tests and simulations to validate safety circuitry and Li-Ion battery management w/ CAN
- Created high-level wiring diagrams of primary high-voltage components such as BMS & MPPT for system integration
- Managed a team of 15 students by regularly assigning tasks, scheduling check-ins, and developing standardized methods

SOLAR SUB-TEAM MEMBER, UCI SOLAR CAR **JAN 2019 – MAR 2020**

- Researched and developed solar cell encapsulation methods to optimize array voltage and current output
- Designed solar array configuration to adhere to American Solar Challenge regulations and vehicle dimensions
- Maintained design document outlining manufacturing methodology, test results, data collection, and quality analysis

WORK & EXTRACURRICULARS

SEASONAL SALES ASSOCIATE, UNIQLO **JUN 2019 – SEP 2019**

- Excelled in interacting with shoppers by recommending products, outfitting, and promoting sales
- Developed understanding of marketing and gauging customer needs to successfully meet daily sales quota

CO-FOUNDER, SCIENCE OLYMPIAD AT UCI **SEP 2018 – JUN 2020**

- Led board members through scheduling, planning, and executing a large-scale regional Science Olympiad competition
- Oversaw day-of-event logistics while quickly and efficiently adapting to mitigate any potential event setbacks

TUTOR, THE TUTORING CENTER **JUL 2017 – JAN 2018**

- Tutored students from pre-school to high school in STEM subjects such as basic math, physics, calculus, and stats
- Kept students engaged and on task by assessing and understanding individual needs and learning habits

SKILLS & EXPERIENCE

- **Software Experience:** C, C++, assembly language, Linux shell
- **CAD Experience:** EasyEDA, Autodesk EAGLE, KiCAD, PSpice (OrCAD)
- **Manufacturing & Hardware Experience:** welding (MIG), basic woodworking & machining, soldering, various lab equipment (power supplies, signal generators, oscilloscopes, DMMs)
- **General Experience:** GSuite, Microsoft Office, LaTeX, technical writing, teamwork, project management
- **Working Knowledge In:** MATLAB, Python, HTML, CSS, Flask, VHDL, GitHub & Git , CAN communication