Kevin Lee

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EDUCATION

University of California, Irvine, CA **Sep 2025 – Dec 2026(Expected)**
Master's Degree, Embedded and Cyber-Physical Systems
Courses: Embedded System Modeling and Design, Internet of Things (IoT) Systems and Software

National Taiwan University, Taipei, Taiwan **Aug 2019 - Jul 2021**
Master's Degree, Mechanical Engineering
Courses: Software and Hardware System Development under Industry 4.0, Design and Practice of Intelligent Vehicles

National Cheng Kung University, Tainan, Taiwan **Aug 2014 - Jul 2018**
Bachelor's Degree, Mechanical Engineering

WORK EXPERIENCE

Senior Firmware Engineer,* *Delta Electronics Inc. **Oct 2021 - May 2025**

- Developed embedded firmware for EV traction inverters in C as a production-release software component engineer.
- Performed CPU runtime load analysis and optimization, reducing system load from 55% to approximately 35%.
- Automated the software release pipeline, cutting verification effort by roughly 85%.
- Led ASPICE LV 2 & 3 project scope SW test as Software Test Leader w. certification awarded.
- Integrated production procedures by developing the EOL SOP for shipment-safety software package validation.
- Collaborated globally and provided technical support to customers and teams in the USA, India, Germany, Spain, and Italy.
- Delivered on-site technical support at R&D centers in Detroit (USA) and Bengaluru (India).

Project Lead,* *Advanced Power R&D Center, National Taiwan University **Aug 2019 - Jul 2021**

- Led a 6-person team to successfully complete two cooperative research projects.
- EV Truck By-wire HiL platform, subsystem development and powertrain integration.
- Designed and implemented 8kW Plugged-In range extended hybrid power system for scooters.
- Built STM32-based VCU embedded software for energy-management control and CAN-FD communication.
- System energy consumption modeling with Simulink/dSPACE RTI for management strategy development.
- Planned and executed AVL dynamometer tests for WLTP and WMTC driving-cycle verification.
- Achieved approximately 8.5% CO_2 reduction compared to a conventional ICE powertrain using the hybrid prototype.
- Master's Thesis: Development of Energy Management Strategy for Range Extended Hybrid Scooter with HiL Validation and Well-to-Wheel CO2 Emissions Evaluation

On-site Engineering Intern,* *GE Aviation **Jul 2018 - Aug 2018**

- Commercial aircraft turbine engine shop On-Site Engineer
- Investigated causes of turbine component scrap and conducted yield analysis.

SKILLS

- Programming: C, Python, Simulink, FreeRTOS, RTA-OS, SystemC
- Development Platforms: IBM Rhapsody, Enterprise Architect, IBM Rational, Git, Jenkins
- Embedded Platforms: STM32, ESP32, Infineon Aurix, Arduino, Raspberry Pi
- Validation Platforms: VectorCAST, HelixQAC, dSPACE, MicroAutoBOX, AVL Dyno
- Standards/Frameworks: MISRA C, ASPICE, Software-Dev-Life-Cycle, KGAS, ISO26262, HiL, CiL, MiL
- Communication Protocols: CANBUS, CANFD, I2C, SPI, UART