Kevin Lee

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Embedded Firmware Engineer with 3+ years of experience, currently pursuing a master's degree in **Embedded and Cyber-Physical Systems** at **UC, Irvine**. Skilled in C programming, low-level driver development and automated verification; seeking opportunities in **System Engineering and Embedded Software Engineering**.

EDUCATION

-University of California, Irvine, CA   **Sep 2025 - Dec 2026(Expected)**
Master's Degree, Embedded and Cyber-Physical Systems

-National Taiwan University, Taipei, Taiwan   **Aug 2019 - Jul 2021**
Master's Degree, Mechanical Engineering

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

ENGINEERING WORK EXPERIENCE

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

- Developed EV Traction Inverter embedded firmware in C. Production formal release SW components developer.
- Owned project SW runtime CPU load analysis and optimization. Improved CPU runtime load from 55% to ~35%.
- Automated SW release pipeline, reducing verification effort by ~85% (10 R&D × 5 days to 2 × 3 days).
- Led ASPICE LV 2 & 3 project scope SW test as Software Test Leader w. certification awarded.
- Production procedure integration. Developed EOL SOP for shipment safety SW pack integration/validation.
- Global team collaboration and global-customer technical support. (USA, India, Germany, Spain, Italy)
- Delivered on-site technical support at Detroit (U.S.) and Bengaluru (India) R&D centers.

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

- Led a team of 6 and completed two co-op 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 scooter.
- Designed and implemented STM32-based VCU embedded SW for energy management control and CANFD.
- System energy consumption modeling with Simulink/dSPACE RTI for management strategy development.
- Planned/executed AVL dynamometer tests for WLTP and WMTC pattern verification.
- Reduced CO_2 emissions by ~8.5 % compared to an ICE powertrain on Hybrid powertrain 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.

RELEVANT SKILLS

- Programming : C, Python, Simulink, FreeRTOS, RTA-OS
- Development Platforms : IBM Rhapsody, Enterprise Architect, IBM Rational, 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