TWO ADDITIONAL ELECTRONICS ENGINEER CVS - SYDNEY

CV 1: PRIYA SHARMA

Electronics Engineer - Embedded Systems & IoT Specialist

Contact Information

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PROFESSIONAL SUMMARY

Dedicated Electronics Engineer with 6 years of specialized experience in embedded systems design, IoT device development, and consumer electronics. Expert in microcontroller programming, wireless communication protocols, and PCB design with proven ability to deliver innovative solutions from prototype to mass production. Strong background in crossfunctional collaboration and agile development methodologies within Sydney's technology sector.

CORE TECHNICAL SKILLS

Circuit Design & Development

- Analog and digital circuit design and simulation
- Mixed-signal PCB layout and routing
- Power management circuit design
- Signal conditioning and amplification circuits
- Component selection and cost optimization

Design Tools & Software

- Altium Designer (Certified Professional) 5 years
- KiCad PCB design suite 4 years
- LTSpice and PSpice circuit simulation 6 years
- SIwave for signal integrity analysis 3 years

Ansys Maxwell for electromagnetic simulation - 2 years

Programming & Firmware Development

- C/C++ embedded programming 6 years
- Python for test automation and data analysis 5 years
- VHDL for FPGA programming 3 years
- JavaScript for IoT web interfaces 4 years
- MATLAB for algorithm development 4 years

Microcontrollers & Embedded Platforms

- STM32 ARM Cortex-M series 5 years
- Arduino and ESP32/ESP8266 platforms 4 years
- Raspberry Pi and embedded Linux 3 years
- Texas Instruments MSP430 and C2000 3 years
- Nordic nRF series for Bluetooth applications 2 years

Communication Protocols & Wireless

- I2C, SPI, UART serial communication
- Bluetooth Low Energy (BLE) and Classic
- WiFi 802.11 implementation and optimization
- LoRaWAN for long-range IoT applications
- Modbus and CAN bus for industrial systems

Test Equipment & Validation

- Digital oscilloscopes and logic analyzers
- Spectrum analyzers for EMC testing
- Network analyzers for impedance measurements
- Environmental test chambers
- Automated test equipment programming

PROFESSIONAL EXPERIENCE

ELECTRONICS ENGINEER | SmartDevices Australia, Sydney

May 2021 - Present (3+ years)

Lead embedded systems engineer developing next-generation IoT devices for smart home and industrial automation markets.

Key Achievements:

- Designed and launched 5 successful IoT product lines generating \$1.8M annual revenue
- Reduced power consumption by 50% through innovative sleep mode algorithms
- Led technical team of 4 engineers on multi-platform development projects
- Achieved 99.2% first-pass PCB success rate through rigorous design reviews
- Implemented automated testing reducing product validation time by 35%

Technical Responsibilities:

- Design low-power embedded systems with battery life exceeding 2 years
- Develop wireless sensor networks using Bluetooth LE and WiFi protocols
- Create custom PCB layouts for compact IoT devices (4-6 layer boards)
- Program real-time firmware for ARM Cortex-M microcontrollers
- Conduct EMC pre-compliance testing and design optimization
- Collaborate with mechanical engineers on product integration

EMBEDDED SYSTEMS ENGINEER | TechFlow Electronics, Sydney

March 2019 - April 2021 (2 years 2 months)

Specialized in consumer electronics design with focus on wearable devices and health monitoring systems.

Key Achievements:

- Developed award-winning fitness tracker with advanced biometric sensors
- Implemented secure Bluetooth communication protocols for health data
- Reduced manufacturing costs by 25% through component optimization
- Successfully passed regulatory certifications (ACMA, FCC, CE)
- Mentored 2 junior engineers in embedded firmware development

Technical Responsibilities:

• Design analog front-end circuits for biosensor applications

- Develop low-power wireless communication systems
- · Create embedded software for real-time signal processing
- Perform thermal analysis and battery life optimization
- Coordinate with app development teams for device integration
- Prepare technical documentation for certification bodies

JUNIOR ELECTRONICS ENGINEER | Innovation Labs, Sydney

January 2019 - February 2019 (8 months)

Entry-level position focusing on prototype development and testing for startup technology company.

Key Achievements:

- Contributed to 3 successful prototype developments for client presentations
- Developed automated test scripts reducing manual testing time by 40%
- Assisted in patent application preparation for innovative circuit designs
- Received "Rising Star" award for technical excellence and initiative

Technical Responsibilities:

- Build and test electronic prototypes from schematic designs
- Perform component-level debugging and troubleshooting
- Create test procedures and validation protocols
- Support senior engineers in PCB layout and design reviews
- Document test results and prepare technical reports
- Maintain laboratory equipment and testing infrastructure

EDUCATION & CERTIFICATIONS

Bachelor of Electronics and Communication Engineering | University of Technology Sydney 2015-2018 - Graduated with High Distinction (GPA: 3.8/4.0)

- Major: Embedded Systems and Wireless Communications
- Thesis: "Energy-Efficient Protocols for Wireless Sensor Networks"
- Dean's List: 2017, 2018

Professional Certifications:

- Altium Designer Certified Professional (2022)
- Certified Embedded Systems Engineer IEEE (2021)
- IPC-A-610 Electronics Assembly Standards (2020)
- Bluetooth SIG Qualified Developer (2023)

Additional Training:

- Advanced EMC Design Workshop Engineers Australia (2023)
- IoT Security Best Practices CSIRO (2022)
- Agile Hardware Development Atlassian (2021)

PROFESSIONAL DEVELOPMENT

Recent Training & Workshops (2021-2024):

- Machine Learning for Edge Devices Google Developer Program (2024)
- Advanced RTOS Programming FreeRTOS Foundation (2023)
- Wireless Security Protocols UNSW Professional Development (2023)
- Leadership Skills for Technical Professionals Engineers Australia (2022)
- 5G IoT Applications Workshop Telstra Innovation Lab (2022)

Industry Involvement:

- Active member of Engineers Australia Electronics College
- IEEE Member Computer Society and Communications Society
- Volunteer mentor at Sydney Women in Engineering Network
- Regular attendee of Sydney Embedded Systems Meetup

NOTABLE PROJECTS

Smart Agriculture Monitoring System (2023-2024)

- Designed complete IoT solution for crop monitoring with LoRaWAN connectivity
- Integrated soil moisture, temperature, and light sensors with solar power management
- Achieved 5-year battery life through ultra-low power design techniques

• System deployed across 25 farms in NSW with 99.5% uptime reliability

Wearable Health Monitor (2020-2021)

- Developed comprehensive fitness tracking device with heart rate and activity monitoring
- Implemented secure Bluetooth data transmission with smartphone app integration
- Achieved clinical-grade accuracy for heart rate measurement (±2 BPM)
- Product launched successfully with 10,000+ units sold in first year

TECHNICAL PUBLICATIONS

- "Power Optimization Techniques for Battery-Powered IoT Devices" IEEE IoT Journal (2024)
- "Secure Communication Protocols for Wearable Health Devices" Electronics Australia (2023)

LANGUAGES & ADDITIONAL SKILLS

Languages:

- English (Fluent)
- Hindi (Native)
- Spanish (Basic)

Additional Skills:

- Project management and team coordination
- Technical writing and documentation
- Client presentation and communication
- · Cost analysis and vendor management
- Quality assurance and compliance testing