

DAVID JOHNSON

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(46) 733-441305

Linkedin

GitHub

SKILLS

- C | C++ | Python | Java | Rust | C# | Bash | Flutter | SQL | Matlab
- Lauterbach | GCC | Oscilloscopes | Logic Analyzers | GitLab | Jenkins | Git | Docker | PyTorch | TensorFlow | Jira | Doors | Protocol Analyzers | OSEK | RTOS | Linux | Windows
- Embedded Systems | Firmware development | TCP/IP | Autosar | I2C | SPI | ASPICE | UDS | CAN | CANFD | Flexray | Compiler | Vehicle management | Agile | Microservices | Distributed Systems | CI/CD | Machine Learning | Computer Vision | NLP | Video and Audio Processing

EXPERIENCE

- **BorgWarner AB** Landskrona, Sweden
Senior Embedded Software Engineer Jun 2019 - Present
 - Developed clear, maintainable code for **boot loaders**, **application**, and control models using **C** and **Matlab**, resulting in a 25% reduction in debugging time and enhanced system performance.
 - Designed and configured **RTOS tasks scheduling** for ECUs using **interrupts** and **polling**, resulting in a 20% improvement in real-time performance and resource optimization.
 - Led the development of multiple embedded projects, managing the entire lifecycle from identifying system requirements and stakeholder dependencies to **board bring up**, **firmware implementation**, testing, debugging using **Lauterbach** and **Oscilloscopes**, and successful delivery, ensuring alignment with project goals and timelines.
 - Led the design and development of **flashing tools** for ECUs using **C#**, **Rust**, and **Flutter**, improving deployment efficiency and reliability by 30% across multiple projects.
 - Designed and implemented scalable APIs and microservice applications integrated with CI/CD pipelines using **Python**, **Groovy**, **Java**, **SQL**, **GitLab** and **Azure**, efficiently handling 1000+ requests daily.
- **FPT Software Company Limited** Singapore
Senior Embedded Software Engineer Nov 2018 - May 2019
 - Led the design and implementation of **Emergency TCP/IP-based Call** and Diagnostic Services for vehicles using **Davinci** and **C**, ensuring reliable emergency response capabilities and robust vehicle diagnostics.
 - Designed and configured OS tasks using **interrupts** and **polling**, achieving a 30% improvement in system responsiveness and optimized resource utilization.
 - Integrated CAN stack from Vector for a telematics project, following the **Autosar** standard, which enabled seamless ECU communication via **CAN** bus.
 - Designed and created various tools to automate tasks using **C++** and **C#**, resulting in enhanced quality and a 40% reduction in manual workload.
- **Bosch Global Software Technologies Company Limited** Ho Chi Minh city, Vietnam
Senior Embedded Software Engineer May 2014 - Oct 2018
 - Configured RTOS tasks using **C**, integrated **CAN** stacks, and validated **SPI**, **I2C** communication protocols for powertrain systems using **debugger**, **multimeter** and **oscilloscopes**, leading to a 15% increase in system efficiency and enhanced reliability.
 - Led the test team in creating high-level designs for comprehensive system testing, improving test efficiency and ensuring thorough coverage of project requirements.
 - Developed and conducted **unit and system test cases**, achieving an overall code coverage of over 95%, significantly reducing potential defects in production.

EDUCATION

- **Master of Science in Machine Learning, Systems and Control** Lund, Sweden
Lund University
- **Bachelor of Science in Electrical and Electronics Engineering** Ho Chi Minh city, Vietnam
HCMC University of Technology

OTHERS

- Certificate of Professional Scrum Master I (Jan 2021)
- Certificate of Advanced Software Engineering course from Lund University (Apr 2024)