Trevor Borden

Software Engineer · Florida, United States · trevormborden@gmail.com · (518)222-9800 · www.linkedin.com/in/trevorborden

Summary

Embedded software and data engineering specialist with experience in the automotive and home appliance industries. Recently graduated with a Bachelor of Science in Software Engineering from Rochester Institute of Technology. Looking for a full-time entry-level position in software development and engineering.

Experience

Jan 2022 - May 2025 **Lead Database Engineer** Electric Vehicle Team

The Electric Vehicle Team at RIT designs and builds electric racing vehicles. Before my contributions, the team had no form of data collection or analysis. As the lead database engineer, I led the development of SQL and NoSQL databases for telemetry data that provide new insights into bike performance.

- Constructed original database schema and website prototypes to support system concept
- Established custom ETL pipeline to interpret and digest .MF4 files using .dbc files
- Facilitated the development of a full stack application for data uploads and data visualization
- Produced technical documentation explaining software and architectural decisions
- Managed projects in an Agile team environment, resulting in project completion 3 weeks before deadline (4 direct reports)
- Enhanced battery management system to expand system communication capacity, increasing communication capabilities by 50%

Tools: C/C++, Python, CAN, MySQL, NoSQL, Flask, REST API, MongoDB, React, Javascript, Git, Jira
Relevant Skills: Embedded Software, Data Engineering, Web Engineering, Leadership, Agile & Scrum, Software Architecture, Version Control

Jan 2024 - June 2024 **Embedded Software Engineer** Keurig Dr Pepper

When I joined Keurig Dr Pepper, the demand for new products created a need for portable software that could be used on ever-changing firmware. My contributions made the existing IoT library more modular and OS-agnostic, allowing it to be used on any brewing hardware.

- Increased feature testing speed by up to 25% by creating CLI commands to bypass system processes
- Decoupled system architecture by establishing a new callback system for an IoT connectivity library
- Utilized Jenkins for continuous integration and deployment
- Enhanced efficiency and reliability by exposing architectural weaknesses in existing design, reducing stored file size by 35%

Tools: C/C++, IAR, Google Test, RTOS, IoT, Git, Bitbucket
Relevant Skills: Embedded Software, Agile & Scrum, Software Architecture, Software Testing, Version Control

June 2023 - Aug 2023 **Full Stack Software Engineer** GlobalFoundries

In the semiconductor industry, tool failures can be costly and often difficult to resolve. During my time at GlobalFoundries, I developed data-driven solutions to detect tool failures earlier and provide insights into why they occurred; leading to a reduction in tool down-times.

- Expedited tool maintenance by creating web interface which displays insights into tool failure
- Optimized test coverage and software reliability by introducing E2E unit and integration testing with Cypress
- Demonstrated independent problem solving skills as only software developer on the team
- Reduced risk to tools and products by increasing visibility on immature products and flagging instances of unacceptable tool conditions

Tools: Javascript, PHP, Cypress, SQL, OracleDB
Relevant Skills: Web Engineering, Software Testing, Data Engineering, Data Analysis, Unit Testing, CI/CD

Jan 2023 - June 2023 **Embedded Software Engineer** Transonic Systems

When I joined Transonic Systems, they were starting a massive refactoring project in which 60% of the code needed to be rewritten. In a team of five developers, I contributed to 30% of the refactoring effort in 3 months, which resulted in project completion 1 week before expectation.

- Participated in code review sessions to discuss code quality and architectural decisions
- Improved system architecture and design by employing modern design patterns
- Elevated code clarity and modularity by refactoring legacy software to a modern, platform-based solution

Tools: C/C++, Linux, QTCreator, Git
Relevant Skills: Embedded Software, Software Architecture, Software Testing, Version Control, Unit Testing

Education

May 2025 **Bachelor's Degree in Software Engineering** Rochester Institute of Technology GPA 3.78