Aaron Tibben - Software Developer

GitHub | Linkedin | Portfolio | Aaron.Tibben@gmail.com

SKILLS

C#, .Net, Entity Framework, React, Angular, RXJS, Javascript, Typescript, HTML, CSS, GIT, SQL, Linux

WORK EXPERIENCE

Ross Video | Iroquois ON | Programmer Analyst | Nov 2023 - Feb 2025

- Migrated C# ETL pipeline to SQL server agent jobs, heavy processing was left in C#. Added redundancy, monitoring and fault tolerance, closed database connection properly and reduced network traffic which increased performance by 80%
- Collaborated with stakeholders to update applications to incorporate a new vendor. Migrated and integrated existing services using C# and SQL, replacing 3 legacy SMT lines with 1 new line. This resulted increased productivity of around 120%, reduced labour time about 66% and component wastage by 28%
- Developed Grafana dashboards using HTML/CSS/JS/SQL for shop floor reporting, and delivered insights which resolved an improper calculation of labour time
- Pioneered the creation of a form content management system with Angular; the user-friendly platform allowed manufacturing teams to launch their own data logging applications

Ross Video | Iroquois ON | Manufacturing Systems Specialist | Dec 2022 – Nov 2023

- Refactored C# file saver utility to facilitate batch inserts of text files into SQL Server. Removed exclusive lock on table, unnecessary data reads, and normalized data from first to second normal form dropping execution time from 15 minutes to ½ a second per 10,000 files
- Removed approximately 25,000 lines of code across Angular applications and reduced zone js calls by about 6% by developing a form library compatible with template and reactive forms
- Engineered robust TypeScript types and interfaces for handling incoming JSON and XML data from REST APIs; enforced stricter typing, which led to a 8% reduction in application bugs and enhanced developer productivity
- Diagnosed and resolved various TCP/IP network, hardware and software related issues on internal and vendor specific manufacturing equipment saving roughly 8-12 production hours per annum

Ross Video | Iroquois ON |SMT Line Operator | Feb 2021 – Dev 2022

- Inspected PCB boards for defects manually and using automated equipment
- Discovered, documented and reported various software issues to Operational Software Technology department
- Provided technical support and training to junior SMT Operators

PERSONAL PROJECTS

MFG   March 2025

My approach to the "job shop scheduling problem"

- Follows client-server architecture
- RESTful API with Golang, Huma to write OpenApi spec, Traefik for load balancing, rate limiting, reverse proxies, following hexagonal architecture pattern, structured as a monolith with the option to make it into a micro service
- For CI/CD pipeline, use Docker containers with Bash scripts for configuration
- Postgres for a RDBMS database, Redis for caching, raw SQL queries in place of an ORM and Tern for database migrations
- Typescript, React for SPA, using Ant Design as a UI library, webpack/babel to bundle and transpile JSX

EDUCATION

Seaway District High School   Iroquois, ON
Secondary Education Diploma   Graduated June 2019
Awards: Introduction to Computers (2017), Computer Science (2018), Computer Science (2019)