

RANDY GAMAGE

SENIOR PRINCIPAL SOFTWARE ENGINEER



CONTACT

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PROFILE

Experienced full stack developer with a proven ability to deliver high quality solutions under pressure. Passion for applying new technologies to solve difficult problems.

EDUCATION

B.S. Mechanical Engineering
UC Davis, CA, USA
Electrical, Software Engineering
Self-taught

TECHNOLOGIES

C# /.NET, HTML5, CSS3/SASS
Javascript/Typescript, SQL
DevOps, CI/CD Automation
React, Angular, Blazor, WPF
Azure Functions, IoT, Event Hub
LINQ/SQL Entity Framework
TFS, GIT, YAML, REST APIs
Unit testing, test automation
AccelQ, Selenium

SKILLS

Team player
Problem Solver
Innovator
Customer focused
Self-motivated

EXPERIENCE

TechnipFMC Schilling Robotics | 2005 – Present
Schilling Robotics designs high performance underwater robotic systems, remote operated vehicles, manipulators, and custom systems.

SENIOR PRINCIPAL SOFTWARE ENGINEER

Instrumental in designing, implementing, integrating testing, and supporting impactful web applications using for multiple platforms, including a factory floor integration app that increased productivity dramatically across the organization. Apps included an Engineering Change Order system, E-Commerce customer site integrated with ERP system, workflow automation for factory transactions, Product Configurator, Label Maker, Shared Printing service, and “ServiceHub” (company-wide REST API) and a Shipping Automation app. Led code reviews, driver of code quality and maintainability.

Led a team to develop a Remote Diagnostics service for customers, for streaming live telemetry data from vehicles around the globe, data analytics, visualization, archiving and diagnostics. Used Azure IoT framework, Azure Functions, blob storage, Cosmos DB, Event Hub, and Time Series Insights. Used WiX to create windows installer package to deploy windows service and UI app. Used Docker to build and deploy Edge device agents.

EXPERIENCE (CONT'D)

ENGINEERING MANAGER

Managed a team of 14 software developers for four years. During my tenure as manager, we improved our software development quality and processes in areas of DevOps, CI/CD automation, source control and SQA. Transitioned from an older vehicle control framework (“Silvertip”) to a more modern version (“Hammerhead”), and rolled it out successfully to the field on schedule.

SENIOR SOFTWARE ENGINEER / PROJECT LEAD

Served as project lead to the largest custom engineering project in Schilling’s 30-year history (Expro AX-S System), working closely with the customer to develop a custom subsea well intervention control system. As lead and system architect, oversaw design of electrical, mechanical, and software at the system level, and worked closely with leaders in each discipline to design, produce, test, and deliver the product for the customer over a 5-year period.

SOFTWARE ENGINEER

Developed embedded firmware for real-time PID control of vehicle thrusters, lighting, and switch-panel controls. Integrated device drivers into vehicle control system. Worked on implementation Spanning Tree (RSTP) network protocol for fiber optic redundancy, and multi-casting protocols for video streaming from subsea to the surface.

Schneider Electric | 2002 – 2005

Schneider Electric is a leader in industrial control systems, and inventor of the modern PLC (Programmable Logic Controller) and Modbus protocol, with 130,000 employees.

ETHERNET ARCHITECT

My main role was to drive the integration of Ethernet protocols across their family of programmable logic controllers. Worked closely with teams in France and North Carolina. Developed new model of Ethernet managed switch and an Ethernet-enabled version of the Twido model PLC. Contributed to Schneider’s progress in CMMI software maturity model certification. Extensive use of UML-driven architecture and VxWorks real-time control software (RTOS).

OTHER SKILLS

- Electrical Engineering: PCB Schematic capture, board layout, microcontroller circuit design, embedded system programming
- 3D Modeling, animation, visual effects, simulation, using Blender and Unity
- Mobile/Tablet/Desktop responsive design: Designed social tennis scheduling app for desktop, using React, then re-written in Blazor. Code is available on GitHub.
- ERP Systems (Enterprise Resource Planning) – extensive integration and back-end experience with advanced SQL queries, views, stored procedures, scheduled jobs, index optimization, etc.
- Driver of code quality improvements, automated testing and observability tools