zepski.net | github.com/brian-rieder brian@zepski.net | 574.309.0766

EDUCATION

MICHIGAN STATE UNIVERSITY | MS IN COMPUTER SCIENCE | Cumulative GPA: 3.83 / 4.0

East Lansing, Michigan | Graduation: May 2020 | College of Engineering

PURDUE UNIVERSITY | BS IN COMPUTER ENGINEERING | Cumulative GPA: 3.69 / 4.0

West Lafayette, Indiana | Graduated: May 2017 | College of Engineering | Dean's List (All Semesters)

EXPERIENCE

GE AVIATION SYSTEMS | EDISON ENGINEERING DEVELOPMENT PROGRAM

CIVIL UAS EMBEDDED DEVELOPER & DEVOPS ENGINEER

July 2018 - August 2019 | Grand Rapids, MI

- Developed flight and control law software for embedded application of a civil-application drone autopilot
- Mined telemetry logs and analyzed flight characteristics of actual flight test data.
- Standardized development platform for a team of UAS developers to eliminate the "works on my machine" problem.
- Created a continuous integration framework utilizing a Gazebo simulation environment for automated testing.

UI DEVELOPER

July 2017 - July 2018 | Grand Rapids, MI

- Resolved problem reports and supported UI aspects of next generation and legacy FMS projects.
- Developed and tested GE's next generation FMS UI features (Ada/VectorCAST).
- Analyzed, verified, and validated formal test procedures and their failures for legacy FMS projects.
- Organized scrum development configuration for task assignment and ran daily progress reporting.

GE AVIATION SYSTEMS | INFRA-ENGINEERING CO-OP/INTERN

August 2013 - August 2016 (Rotational) | Grand Rapids, MI

ANALYTICS RESEARCH AND SOLUTIONS ENGINEER

- Generated, validated, and provided datasets to quantify and indicate First Time Yield, Nonconformances, Scrap and Rework, and Out of Box Failures to be reported via Spotfire visualization dashboards.
- Identified issues within Electronics Value Stream sites' data schemas and prescribed solutions that ranged from directly addressing processes to manually compiling reports or PostgreSQL queries to rectify data.

ADVANCED COMMON MODELING ENVIRONMENT (ACME) WEB DEVELOPER

- Created a web based interface for users to interact with an Enterprise Architect driven database.
- Increased autonomy of data entry processes and diagram creation for customer presentation through use of jQueryUI and yFiles libraries in Javascript.
- Implemented back-end server and database interfacing with PHP and MSSQL to retrieve, update, and delete entries from tables with minimal user interaction.

PLATFORM ARCHITECTURE STUDY LEAD SUB-SECTION ENGINEER

- Led modeling efforts on the Platform Architecture Study Internal R&D team working to create a model to migrate future era business jets from a federated platform to a GE designed Integrated Modular Architecture (IMA).
- Created the model of and performed functional decomposition, software partitioning, and electrical hardware analysis of ATA 100 defined subsystems.

SKILLS

PROGRAMMING

Most Proficient:

C • C++ • Bash • Python • JavaScript/jQuery • PHP • Verilog

Proficient:

MySQL • PostgreSQL • MSSQL • HTML/CSS • Assembly • Ada

Worked With:

Ruby • Matlab • Android • ATFX • Visual Basic • Haskell • Scala • (Emacs) Lisp

SOFTWARE TOOLS

Amazon Web Services (Certified Cloud Practitioner) • Git Administration • Docker • Jenkins • JUnit • Linux Applications