
Summary

- Full Stack Developer with 4 years experience including exposure to Java, R, TypeScript, JavaScript, HTML, CSS
- Advocate for sound coding practices, Test-Driven Development, and continuous cross-discipline communication.
- Passionate about solving problems and learning new technology. For many years, my friends and I have met for a weekly “code-night” to socialize, hack on new problems, learn new languages, technologies, and frameworks.
- Applied PMI practices of scope, schedule, and budget management to multiple projects.
- Love to work as a force multiplier; getting the job done even though the task may not be in my field of expertise.
- Extensive military leadership training, which is well suited to a corporate and team environment, has allowed me to mentor others to be stewards of their resources and promote personal growth both in and out of the organization.

Relevant Work History

Full Stack Developer	Six Actual	2014 - 2017
End-to-end software firm specializing in custom web, cloud based, and mobile solutions for private and public entities.		
<ul style="list-style-type: none">• Used JUnit TestRule concept to re-write how integration tests are written and run. Achieved a 400% test coverage increase, 50% test code-base reduction, and significant improvement in readability and visibility. Reduced costs due to test code initial development and re-work.• Developed full support of client’s access to geospatial, precision agriculture data in a MongoDB via Hibernate and QueryDSL through REST endpoints, supported by appropriate business logic accessing a MySQL database.• Created REST frameworks with Swagger annotations producing XML, JSON, geo-spatial, and binary content providing a variety of usage patterns including: asynchronous calls to distributed micro-services (queue-aware and consumer transparent methodologies), multi-tenant capabilities, fully version history, deletion aware, and broad operational and management API capabilities.• Created multiple portlets for a large, complex, GWT/GXT web application and wrote the supporting server-side business logic to retrieve and display data from multiple MySQL tables simultaneously.• Developed internal, web-based, project management and cost tracking application utilizing MySQL, Spring Data, Spring Web MVC, and Angular4 to include full unit and integration testing with Karma and Protractor.• Responsible for all aspects of data modeling, persistence, and query operation. Familiar with the trade-offs between traditional SQL RDBMS and NoSQL systems. Provided meaningful data sets for solid unit test coverage in both systems.• Modified Maven files in an aggregator project by using a dedicated project module to contain and distribute dependencies and versions to ensure development consistency. Worked with architects and senior engineers to determine the appropriate dependency versions and their inter-dependencies.• Worked with architects and senior engineers after hours to develop an open-source framework to be used as a springboard for developing projects within the company. Framework included security, messaging, unit and integration testing, MySQL database, Java 8 server side, and Angular4 client side components. Increased ability to rapidly prototype a project concept for marketing purposes and decreased project development startup time.		

Civil Engineer, Water Resources**WHPacific****2012 - 2014**

Multi-sector, regional engineering firm focused on enhancing client satisfaction through creative, exceptional service.

- Perform calculations and analysis of data and designs utilizing industry best practices and industry standard tools.
- Use problem solving skills to determine the best design alternative considering construction and maintenance cost.
- Create simple javascript application to calculate and present preliminary design for above ground, arctic, sewer system.
- Extensively used R to rapidly prototype possible potable water sanitation design permutations based on EPA requirements. Drastically reduced the time between design parameter determination and final design decision.
- Converted very large construction documents originally written in Microsoft Word to \LaTeX . Improved format consistency and reduced editing/maintenance time while enforcing compliance with Construction Specification Institute standards.
- Managed a small team to design a small half-million gallon-per-day, seasonally operated, water treatment plant.

Graduate Research Assistant**Colorado State University****2009 - 2011**

Public research and land grant university responsible for studying agricultural, natural, and environmental phenomena.

- Use R to develop multiple deterministic and stochastic models using natural, spatial, and temporal variables and their associated uncertainties to estimate daily groundwater return volume and dissolved contaminant concentration. Replaced and expanded scope and depth of hard to update, oversimplified, Excel spreadsheet models.
- Created automated scripts generating multiple types of graphical and tabular results using common formatting parameters with provisions for integrating into a large, multi-chapter \LaTeX document.
- Wrote quarterly and annual reports to state agencies detailing water quality sampling efforts and results to include graphical surface representations of spatial and temporal variability.

Engineer Intern, Geotechnical**Engineering Analytics****2009 - 2010**

Civil-Geotechnical consulting firm combining engineering and scientific knowledge with sound project management.

- Compiled and summarized geotechnical reports to assist senior/principal engineers in preparing expert witness testimony in support of design and construction litigation.
- Independently collect and document soil samples to support foundation design and remediation decisions.
- Create a first-of-its-kind Excel VBA analysis to determine the appropriate depth to install micropiles for foundation remediation efforts on soils with high swell potential.

Education

- **Civil Engineering, B.S.**, University of Central Florida, 2008
- **Fundamentals of Engineering Exam**, NCEES, 2008
- **Vehicle Maintenance, A.A.S.**, Community College of the Air Force, 2003

Volunteer Work

- Youth softball assistant coach teaching all aspects of play (except pitching), encouraging the love of a sport.
- Informal coding coach for a small group of local kids, focusing on basic skills using Minecraft and Code Combat.