ROBB DOERING

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Employment

SOFTWARE ENGINEER II, Space Ground System Solutions

June 2019 - July 2021

- Worked on a web application for space-ground command & control systems, using React w/ Redux,
 Java, and C++ to display & interact with high latency, error sensitive ground site information
- Chosen to fill in as project lead during a 3-month planned leave of absence for a team of 6 other full time engineers. Responsible for leading Agile ceremonies, clearing blockers, meeting with stakeholders, UX and system design for new features, designing and delivering training, and more.
- Implemented ~12 significant full stack features, using description documents from software architects for some, and leading the requirements gathering and UX design processes myself for others.
- Owned implementation of systems used by many government satellite programs, contributing to an
 essential piece of the Naval Research Laboratory's response to specific DoD-wide standardization and
 modernization mandates for space related software.
- Regularly and deeply involved in testing, such as being tapped to bring Jest unit tests to an existing code base, or design and lead implementation of plans for functional testing.

AUTOMATION TOOLS INTERN, Fujitsu Network Communications

May 2018 - August 2018

• Worked on an internal web tool for ~50 project managers to complete a new procedure and collect a large volume of data for executive analysis using Java, Spring MVC, and Javascript.

Skills

Projects

github.com/robbwdoering

ADVANCED

Linux • agile • git • Java Javascript • React • Jest Redux • C • C++ • CSS HTML • npm • Three.js regex • JSON • Slack Jira • Inkscape • HCI

FUNCTIONAL

Python • Bash • MySQL
PostgreSQL • Node.js
Express.js • D3.js • C#
REST • WebSockets
satellite.js • GMSEC •
Orbitology • TLEs •
Unity • Lisp • R • RST
Docker • MATLAB

ORIGAMIODYSSEY.COM

A React SPA built to teach origami, the art of folding paper. It uses animated 3D simulations with temporal & spatial controls, hierarchical annotations of folds, and hobbyist augmentations to improve learner performance on audience specific self-assessments. Each specific method in that sentence is supported by research I did as part of GaTech's CS6460: Educational Technology. [Javascript, React, Redux, react-three-fiber, Three.js, Material-UI]

BELLUM.AI

[IN PROGRESS] A React SPA built to provide tools for the notoriously complex tabletop wargame, Warhammer 40k. It uses 3D simulation of the board, complex statistical modeling and analysis, and customizable visualizations to ease and speed along the game. This required a regex parser to read complex "army lists" into json objects for manipulation using a rules-translation schema I designed. [Javascript, React, Redux, d3.js, react-three-fiber, Three.js, Auth0, Semantic UI]

DATA VISUALIZATION IN VR

For my Vanderbilt senior project, I worked with a professor on his research quantifying the benefits of visualizing, selecting, and creating data in VR over 2D options. [C#, Unity, Oculus, Blender]

Education

VANDERBILT UNIVERSITY

Spring 2019

- Earned a B.S. in Computer Science, with minors in Spanish and Philosophy.
- Served as an executive for the Vanderbilt Data Science club and the Wilderness Skills 101 organization.

GEORGIA INSTITUTE OF TECHNOLOGY

Expected Summer 2022

Currently pursuing an online M.S. in Computer Science, with a specialization in Interactive Intelligence.