**Robb Doering**

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<https://robbwdoering.com>

**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.
  + Implemented ~12 significant full stack features, either using description documents from software architects and or leading the requirements gathering and UX design processes myself.
  + 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.
  + Brought automated Jest unit tests to an existing code base, and was regularly tapped to help coordinate functional testing of that same application.
* 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.

**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** Fall 2022
  + Currently pursuing an online M.S. in Computer Science, with a specialization in Interactive Intelligence.

**Projects** (<https://github.com/robbwdoering>)

* OrigamiOdyssey.com
  + A full stack web application 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](https://github.com/robbwdoering/origamiodyssey/blob/main/CS6460%20Proposal.pdf) 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 full stack web application built to provide tools for a complex tabletop wargame called Warhammer 40,000. 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](https://github.com/robbwdoering/bellum.ai/blob/master/docs/meaning_objects.md). *[Javascript, React, Redux, d3.js, react-three-fiber, Three.js, Auth0, Semantic UI]*
* Safety Router
  + A full stack web application that analyzes U.S. road accident data and predicts the relative safety of user driving routes. This was created over the course of a semester with a team of 5 classmates. *[Javascript, Python, React, Flask, Leaflet, D3.js, Material-UI]*

**Skills**

* **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, CI/CD, GMSEC, Orbitology, TLEs, Unity, Lisp, R, RST, Docker, MATLAB