# PARKER HARRIS

(802) 760-7970 rparkerharris@gmail.com PORTFOLIO GITHUB LINKEDIN

SKILLS React, Redux, Javascript, Ruby / Rails, CSS, HTML Canvas, SQL, Git, MongoDB, PHP

# **PROJECTS**

CHECKMATEY (React & Redux, JavaScript, CSS, Ruby on Rails)

live | github

Online Community for Chess Players

- Implemented Active Cable web sockets to allow live matches and facilitate real-time interaction in the community forum
- Designed immersive and intuitive chessboard interface with draggable pieces using React, JavaScript, and advanced CSS
- Incorporated Redux cycle including Thunk middleware to allow seamless interaction between React frontend and Rails backend

## WIND & WAVES (React, JavaScript, HTML Canvas, CSS)

live | github

Sailing Simulator

- Leveraged JavaScript object-oriented programming to implement accurate, modular, three dimensional physics model based on calculations of wind, lift, drag, and torque
- Designed interactive display, allowing users to investigate the unseen forces of sailing with customizable arrows that update in real time

## DON'T DIE TOGETHER (ReactJS, MongoDB, JavaScript)

live github

Multiplayer Zombie Survival Game

- Effectively cooperated in a team of four engineers by dividing the work into distinct areas with clearly defined interactions
- Implemented game logic including game entity movements, aiming and firing weapons, and robust collision detection

# **EXPERIENCE**

#### **Mechanical HVAC Designer**

Aug 2018 - Jun 2019

Robison Engineering, Lynnwood, WA

- Designed HVAC and plumbing systems for commercial and residential buildings (drafted plans in AutoCAD)
- Calculated energy-efficient and cost-effective layouts for equipment and customized designs to owner's specifications

### Math, Science, & Philosophy Instructor

Jun 2014 - Jun 2018

The Attic Learning Community, Woodinville, WA

- Simultaneously managed classes at multiple levels from 6th grade science up to high school calculus
- Created Philosophy and Robotics electives, including curriculum design, administration approval, and instruction

## **High School Physics Teacher**

Mar 2013 - Jun 2014

Bishop Blanchet High School, Seattle, WA

- Instructed seniors in AP Physics and helped implement new Physics course for Freshmen
- Mentored and coached school's robotics team for FIRST Robotics League competition

# **Mechanical Engineer**

Feb 2012 - Mar 2013

Electroimpact, Mukilteo, WA

- Designed and oversaw the manufacture of custom tooling for large scale aircraft assembly (drafted parts using CATIA)
- Saved the company hundreds of man-hours by writing a program in the Windows scripting language AutoHotKey to automate data-entry processes

# **EDUCATION**

Full Stack Web Development - App Academy

Jun 2019 - Oct 2019

MS - Engineering Management - Clarkson University (formerly Union Graduate College)

Class of 2011

BS - Mechanical Engineering & BA - Philosophy - Union College

Class of 2009