# **Brian Aiken**

## **Software Developer & System Engineer**

#### EXPERIENCE

## Department of Defense, Integrated Warfare Systems

#### **Combat System Engineer & Project Manager**

July 2014 - March 2017

- Lead engineering team in the development of complex at-sea missile scenarios designed to meet data driven requirements of major weapons programs
- Managed \$12M test budget that was on schedule and budget throughout the execution year
- Lead Value Stream Analysis effort to identify and fix inefficiencies throughout the test process

#### **Junior Engineer**

April 2012 - July 2014

- Worked with engineering team in the development of a weapon system software architecture allowing multiple systems to utilize common software reducing cost/schedule in fielding new capabilities
- Coordinated the installation and testing of the AEGIS Combat System in a major production environment for three Navy ships located at three shipyards to meet an extremely accelerated schedule
- Worked with naval leadership at the Pentagon to evaluate, define and successfully fund a future AEGIS Weapon System with funding requirements totaling over one billion dollars

### **PROJECTS**

Disclone (Single page chat application built with React/Redux, ES6 and RESTful API)

Live | Source

- Integrated websockets & webhooks to establish Live-Chat and render events in real-time
- Developed custom React components to create a responsive and interactive user experience
- Optimized for scalability using Redux to manage normalized global state
- Built custom authentication pattern using BCrypt (salt + hash) and Rails session cookie
- Utilized Webpack w/ Babel to bundle and transpile the application to support any browser

#### FlappyBird (Addictive side scroller utilizing HTML canvas, and CreateJS)

Live | Source

- Designed for smooth user experience by implementing EaseIJS to provide constant 60 frames per second gameplay and an intuitive interface.
- Developed custom collision detection algorithm for improved collision accuracy and gameplay

#### **IDOM** (JavaScript library with straightforward methods for DOM manipulation)

Source

- Allows for simple HTML DOM traversal and manipulation, as well easy-to-use event handling.
- Includes semantic HTTP ajax requests utilizing promise objects

## SKILLS

Ruby Rails JavaScript React Redux jQuery RSpec SQL CSS3 Pusher MS Project Git HTML5 MATLAB SASS AWS

## **EDUCATION**

#### App Academy

July 2017

- Rigorous 1000-hour software development course with < 3% acceptance rate</li>
- Topics include: Test driven design (TDD), scalability, algorithms, object oriented programming (OOP), design practices, REST, single-page web applications, and web development best practices

## North Carolina State University, Raleigh, NC

December 2011

• Bachelor of Science - Mechanical Engineering