

EMPLOYMENT

Jan 2016 to Oct 2017

Pratt & Whitney · Software & Computer Science Engineer · East Hartford, CT

- Lead software engineer for control system design and safety analysis of a performance optimization system for five commercial jet engines programs
- Created mathematical models of mechanical systems using the Modelica programming language, utilizing skills in object oriented design, fluid dynamics, thermodynamics and heat transfer
- Developed methods and tools for automation of control system safety analysis using Matlab, reducing analysis time by 75%
- Designed data structure parsing algorithm to convert Matlab models into XML for increased efficiency across organizations within the company
- Analyzed software requirements and defined testing procedures for safety critical flight software
- Scripted and executed software tests on commercial jet engine computer systems using C and a Pratt & Whitney created UX based programming language

EDUCATION

App Academy

1000-hour immersive, hands-on full-stack web development course with <3% acceptance rate

2015

University of Connecticut

Mechanical Engineering

GPA: 3.6/4.0

SKILLS

SOFTWARE DEVELOPMENT

JavaScript, React, Redux, Ruby, Rails, HTML5, CSS, Git, PostgreSQL, RSpec, Matlab, Python

PROJECTS

Seaside

AirBnB inspired single page application utilizing Ruby on Rails, React and Redux for boat rentals

- React utilized to create dynamic DOM elements and modular code, enhancing speed and improving user experience
- Created user authentication user BCrypt hashing library to store and protect user information
- Normalized front-end state for efficient management of data through the CRUD process
- Google Maps API and ActiveRecord database querying integrated to provide item filtering on location, price and number of guests