Alex Santamaura





Technical Skills

Languages

JavaScript
Python
C#
Java
SQL
HTML, CSS, XML
MATLAB

Frameworks

Node.js, Express.js .NET Flask Jest, Enzyme

Libraries

React Redux, Redux-Saga D3.js Mapbox GL JS jQuery Knockout Bootstrap

Tools & Technologies

Git, TFS, Subversion Microsoft SQL Docker Heroku Postman Linux, Unix JIRA

Concepts

Container-Component MVC, MVVM Object Oriented Programming Agile Development REST APIs

Relevant Courses

University of Waterloo

Cryptography and System Security (Python, MATLAB)

Introduction to Optimization (MATLAB)

Robot Dynamics and Control (Python)

Cooperative and Adaptive Algorithms (Python)

Data Structures and Algorithms (C++)

Education

BASc Electrical Engineering, University of Waterloo (Sept 2013 - May 2019)

Experience

Bespoke Metrics

Software Developer (Sept 2018 - Dec 2018)

- Shipped advanced search feature for flagship product using React-Redux, greatly reducing time taken for general contractors to find subcontractors that meet specific criteria
- Developed multi-stage watchlist to enable general contractors to keep track of and receive notifications about selected subcontractors
- Built front-end for US risk assessment forms used by 4000+ clients to determine their safety scores
- Designed widgets to display graphs and tables of subcontractor statistics, improving data visualization
- Achieved 100% unit test coverage for all developed features using Jest & Enzyme

Cineplex Entertainment LP

Programmer Analyst (Sept 2017 – Dec 2017)

- Designed front-end solution to organize location image lists using jQuery, Knockout and C# .NET, allowing privileged employees to select and distribute stock images for theatres
- Built feature to retrieve MPA film rating information and display as a table for each province
- Converted 5 production applications from web forms to MVVM as part of a sitewide upgrade
- Coordinated development priorities with manager by assigning roles to team members

Sun Life Financial

Web Developer (Jan 2017 – Apr 2017)

- Developed .NET application to monitor, graphically display and send notifications about file transfers from vendors using JavaScript and C#, reducing volume of missed transfers
- Created and modified SQL stored procedures and tables to organize large client data sets and make endpoints more efficient with front-end requests
- · Assisted senior developer in building tools to filter, sort and color-code projects to organize teams

Allergan Inc.

Customer Service Intern (May 2016 - Aug 2016)

- Managed inventory data transfers for 20 sales reps across Canada to enable prescription drug sales
- · Performed release candidate testing for newly implemented website used to track prescription sales

York Region Transit

Transit Management Systems Engineer (Aug 2015 – Dec 2015)

- Fabricated and tested two designs that secured routers to optimize space and prevented false alarms from occurring to improve team efficiency
- Performed functionality testing on embedded systems such as Cisco routers, modems, credit card readers, and motion sensors to be used in the field

TD Bank Group

IT Security Associate (Jan 2015 – May 2015)

 Designed C# programs to organize server access information by inputting text files and outputting sorted data in excel, reducing the overhead on completing security projects

Projects

UAV Real Time Detection & Tracking

Capstone Project

- Used SDRs and radio signal analysis to find relative position using multilateration to identify and track UAVs
- Data fetched and displayed using Node to a React, D3 and Mapbox based UI

Aldebaran NAO

Forward / Inverse Kinematics

• Set NAO actions by deriving Denavit-Hartenburg parameters and joint angle equations to perform trajectory planning in Python