

# SEAN TAN

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## EDUCATION

### Bachelor of Software Engineering, B.S.E.

September 2017 - May 2022

#### Minor: Aerospace Engineering

GPA: 3.68/4.00

McGill University, Montréal, QC

*Relevant Coursework:* Software Development, Software Systems, Model-Based Programming, Discrete Structures, Digital Logic, Algorithms and Data Structures, Design Principles and Methods, Computer Organization, Engineering Economy, Aerospace Design & Certification Process, Differential Equations

### Communication Arts Program Diploma

August 2013 - May 2017

Montgomery Blair High School, Silver Spring, MD

cGPA: 3.85/4.00 wGPA: 4.59/5.00 ACT: 34

- ❖ Awards: AP Scholar with Distinction, National Merit Commended Scholar, Principal's Award for Academic Excellence, Honor Roll Grades 9-12, Lee Thornton Young Scholars Scholarship, Maryland Traditions Apprenticeship Grant

## SOFTWARE EXPERIENCE

### Software Manager – Robotics Design Team

January 2020 - April 2020

ECSE 211 Design Principles and Methods, McGill University

- ❖ Placed 1st in course-wide competition for best designed robot
- ❖ Supervised and led the software design of an autonomous robot that is able to navigate a closed course & rescue a stranded vehicle
- ❖ Utilized EV3 Lego Mindstorms and leJOS software to program the robot's navigation and sensors
- ❖ Documented the requirements, capabilities and constraints of the system while using a Gantt chart for project management

### Software Developer & Project Documentation Manager

September 2019 - December 2019

ECSE 321 Software Engineering, McGill University

- ❖ In a team of five, created a website and Android application to facilitate the pet adoption process for a local pet shelter
- ❖ Responsible for relational database design using PostgreSQL, backend implementation as RESTful services, unit and integration testing using JUnit, implementation of web and Android frontend, and setup of continuous integration using TravisCI
- ❖ Utilized an Agile (Scrum) framework to guide project management and GitHub wiki to report full project documentation

### Software Developer

October 2019 - April 2020

Blockchain at McGill Club, Montréal, QC

- ❖ Developed a point-of-sale terminal prototype that allows store vendors to accept Ethereum or ERC-Tokens
- ❖ Implemented smart contracts on the Ethereum blockchain for our point-of-sale system that promotes commercial viability
- ❖ Submitted a series of five technical reports to our project sponsor, Deloitte, that detailed key deliverables in our design process

### Software Developer

January 2019 - April 2019

ECSE 223 Model Based Programming, McGill University

- ❖ In a team of six, developed a brick breaker game that ranked in the top three of our class
- ❖ Implemented domain models, UI mockups, controller interfaces, sequence diagrams and state machines

## INTERNSHIP EXPERIENCE

### Software Intern

January 2020 - Present

Snowdrop Architecture, College Park, MD

- ❖ Integrating smart home features into a modular home with a focus on sustainability and efficient energy usage
- ❖ Contributing to the architectural design and planning of a modular home that adheres to the Living Building Challenge

### Microbiology & Biochemistry Intern

May 2016 - July 2016

Uniformed Services University of the Health Sciences, Bethesda, MD

- ❖ Dedicated 30+ hours per week to conducting individual bench work and research on polypoid nuclear division
- ❖ Created and presented a culminating poster to members of the university's community

## SKILLS AND CERTIFICATIONS

**Programming Languages & Technologies:** C, Java, Python, JavaScript, ReactJS, SQL, PostgreSQL, Hibernate, Bootstrap, Node.js, Bash, Assembly, HTML, CSS, Git, Unix, MS Office Suite

**Certifications:** 'Ethereum & Solidity: The Complete Developer's Guide' Udemy Certification

## EXTRACURRICULAR ACTIVITIES

### Varsity Men's Lacrosse – McGill University

August 2017 - Present

- ❖ Demonstrating exceptional time-management skills by committing 20+ hours per week while balancing a full academic course load
- ❖ Titles: 2017, 2018 East Conference Champions; 2017, 2018, 2019 National Semi-Finalists

### National Organization for Business and Engineering

August 2017 - Present

- ❖ Attending monthly workshops & networking events that provide exposure to current events in business and engineering fields

## ADDITIONAL EXPERIENCE

YHack Hackathon [Participant]

Yale University, New Haven, CT

October 2019

Shift Manager & Barista [Paid]

Pitango Gelato, Washington, DC

May 2018 - August 2019

Fitness Coach & Martial Arts Instructor [Paid]

T.E.A.M. BBMAC, Kensington, MD

August 2013 - August 2018