JENESSA **TAN**

4TH YEAR COMPUTER SCIENCE MAJOR

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LANGUAGES: JavaScript, TypeScript, SQL, C/C++, C#*
FRAMEWORKS: React, React Redux, NodeJS, Express, .NET Core, Mocha
TOOLS/ENVIRONMENTS: Git, VSCode, Unity*, Unix*
currently acquiring

BACHELOR OF COMPUTER SCIENCE | SEPT 2017 - PRESENT
University of British Columbia, Vancouver, BC
Expected Graduation: **May 2021**

BACHELOR OF KINESIOLOGY | SEPT 2008 - MAY 2012
University of British Columbia, Vancouver, BC

WORK EXPERIENCE

SOFTWARE ENGINEER (CO-OP) | SEPT 2018 - APR 2019
Tochtech Technologies Inc., Surrey, BC
- Designed and developed a backend reporting module that automatically generated daily, weekly. and trending reports via continuous retrieval of IoT data from a MongoDB database
- Leveraged existing motion sensor data collected from IoT devices in elderly living spaces, modelling the spatial layouts as a graph to analyze and derive walking speeds, with the long-term goal of detecting trends in changes of walking speed in the population as an indicator of overal health
- Conducted thorough and systematic manual testing of hardware (e.g. Tochie speaker, Smarturns) and their accompanying React mobile applications
- **Technologies:** JavaScript, HTML, CSS, NodeJS, React, MongoDB

TECHNICAL PROJECTS

TRADEFORCE | MAY 2020 - PRESENT
- Collaborated with a team of 4 programmers to design and build a full-stack web application that facilitates the exchange of unwanted items in a barter-like system
- Designed and wireframed the UI/UX of the application in Figma enabling the team to work from one cohesive design
- Implemented search functionality to allow users to search the site for desired items
- Created the posting and user profile pages that allow users to view details on selected postings and users respectively
- Constructed an intuitive interface for users to create new postings of unwanted items where they can upload their own images, assign specific categories and apply searchable tags
- **Technologies:** JavaScript, React, React Redux, Express, NodeJS, MongoDB

RECOMMEND | JUN 2019 - PRESENT
- Worked in a team of 4 programmers to design and build a full-stack web application that encourages eco-friendly lifestyle changes by providing product alternatives and a point/reward system
- Created and modelled the database relations and schema, translating these into ER diagrams and normalized tables, from the application's domain and functionalities
- Designed and implemented a dashboard interface for registered businesses to update their business information, add new rewards, view recent reward transactions, and monitor overall reward redemption trends
- **Technologies:** JavaScript, React, Express, NodeJS, PostgreSQL

AE RESOURCE MANAGEMENT | JAN 2020 - MAY 2020
- Teamed up with 7 programmers to design and build a resource utilization optimization system for managing, assigning, and forecasting the workload of skilled personnel to the collection of projects
- Implemented the backend logic to connect the SQL Server database with the React frontend interface allowing for application users to retrieve, update, and delete data pertaining to skilled personnel resources
- Constructed the backend logic for an administration module that enabled system administrators to access and update specific parameters within the application
- Developed and executed automated tests for backend and frontend code
- **Technologies:** C#, JavaScript, .NET Core, React, SQL Server

ARDERPO ROBOT | JAN 2018 - APR 2018
- Built and programmed an Arduino-powered semi-autonomous robot that exercised obstacle avoidance using data from ultrasonic sensors to successfully navigate various maze architectures
- **Technologies:** C/C++, Arduino Microcontroller