Janakitti Ratana-Rueangsri

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SKILLS

Languages	Python | C | C++ | TypeScript | HTML | CSS
Frameworks	Angular | Bootstrap | Flask
Tools/Tech	Git | Unity | Qt | Firebase | Adobe Illustrator | Figma | Motion 5 | WebStorm | VSCode | Arduino

WORK EXPERIENCE

Software Engineering Co-op - Providius Corp. *May 2020 - Aug 2020*

- Built **Angular** app for simulating practical network connections (packet drop, delay, etc.) using a Flask backend, Socketio, and Linux traffic control
  - Designed an intuitive web interface using **Bootstrap** and **Angular Material**
- **Reduced CPU usage by 24%** for a network dashboard web app through developing a custom browser using **Qt** and **Chromium Embedded Framework**
  - Configured Chromium browser for seamless integration of the web app with third party vendor apps
- Developed system for organizing GDrive files by generating filtered file trees on a webpage using **Google App Scripts**

Programmer - Team 4308: Absolute Robotics (FIRST Robotics) *Sep 2017 - Apr 2019*

- Developed the computer vision pipeline to identify target objects on the playing field using **Python**
- Qualified as 2018 FIRST Robotics **World Championship Divisional Semi-Finalists**

PROJECTS

Virtrolio | *Angular, Firebase* *May 2020 - present*

- Worked with a team of 7 to create a web service to allow students to virtually sign each yearbooks during COVID-19
- Developed the front-end interface for viewing yearbook messages using **Angular** and **Bootstrap**
- Implemented Firebase **Cloud Firestore** to allow users to privately sign and receive yearbook messages
- Led the designing of the overall product UI and promotional materials

FedoraField | *Unity video game* *Oct 2019 - present*

- Developed a Unity game in which player's character interacts with enemy projectiles using in-game gravitational fields
- Modelled object interactions with various fields using the Unity physics engine
- Created a level loading system and an adaptive soundtrack

Tangible | *Universal touch-screen device* *Oct 2019 - Dec 2019*

- Built a 'universal touchscreen' accessory with Arduino ultrasonic sensors to enable touch screen capability on non-touchscreen monitors
- Programmed a finger-mapping system to process sensor inputs as taps and gestures on the screen
- Developed a small collection of touch-optimized C# applets to demonstrate effectiveness of hardware

EDUCATION

Bachelor of Software Engineering | University of Waterloo *2019 - 2024 (expected)*

ACHIEVEMENTS

2019 - Schulich Leader Scholarship Canada ($80,000 value)
2019 - Ted Rogers Scholar
2018/19 - 2-time DECA Ontario Provincial Champion

INTERESTS

- Graphic design
- Game Design
- AR/VR
- Guitar
- Filmmaking
- Volleyball