T: 604.822.9677 | F: 604.822.9676 | science.coop@ubc.ca | www.sciencecoop.ubc.ca

# Tyler Smith

Year 2, Computer Science Major 331-228-1563 | tylersmith1308@gmail.com | github.com/tylerqube

#### **TECHNICAL SKILLS**

Programming: Java, C#, Python, XML

Web: HTML, CSS, SCSS, JavaScript, TypeScript, Flask, WebPack, Node.js, Vue, Nuxt, Vuetify, Express

Databases: SQL, SQLite, FireStore, MongoDB, PostgreSQL

**Developer Tools**: Git, Heroku, Firebase, Visual Studio Code, IntelliJ IDEA, SQL Management Studio

Libraries: Mongoose, SpigotAPI

#### WORK EXPERIENCE

## **Full-Stack Development Intern**

Jan 2024 – Present

Salyx Medical Inc.

Victoria, BC

- Developing responsive web application with **Flask** to display user vital signs
- Collaborating with designer to implement Figma designs into responsive webpages
- Refactoring Express API to serve user data from PostgreSQL database several times faster

# **Workflow Solutions Development Intern**

June 2023 – Jan 2024

RR Donnelley

Warrenville, IL

- Updating stored procedures and import tables with MySQL to process millions of lines of client data
- Exporting processed data into XML formatted files for other team members to further process
- Sharing progress and blockers with teammates using internal project management software

## **Computer Science Intern**

Sep 2021 - Apr 2022

Asgard Data LLC

Chicago, IL

- Developed data analysis projects surrounding the Asgard SaaS product
- Visualized client data using AWS QuickSight
- Refactored React front-end web application facing businesses and nonprofits
- Improved visitor engagement by revising front-end landing page

## **Programming Educator**

May 2021 – Aug 2021

CodeCraze LLC

Batavia, IL

- Taught classes on HTML, CSS, and Lua
- Instructed groups of four students at a time at a coding education business
- · Wrote curriculum to present basic computer science concepts to elementary school students

## **Web Development Intern**

Sep 2020 - Apr 2021

Block Bins LLC

Chicago, IL

- Designed and developed responsive web application using HTML, CSS, JavaScript, Vue.js, and Nuxt.js
- Automated client registration using Google Firebase and Firestore
- Presented research and development findings to business mentors and peers

#### TECHNICAL EXTRACURRICULARS

**UBC Launch Pad** 

Sep 2022 – Present

Vancouver, BC

nwHacks 2023

- · Working on a team of twelve developers and designers to build EpiLog, a mobile app for those with epilepsy to manage their condition
- Collaborating using design sprint methodology and **Git** version control

Jan 2023

Vancouver, BC

- Worked in a team of four to develop uniMatch, a full-stack web app at a 24 hour hackathon
- Implemented a Vue.js front-end to view universities through a dating-app-style swiping system
- · Collaboratively wrote and tested an algorithm to calculate university recommendations based on preferences
- Used Google Firebase to authenticate users and store profile information

MIT BattleCode 2022 Jan 2022

- Competed independently in a real time strategy AI programming competition
- Implemented pathfinding and swarm AI with Java for a self-strategizing army of virtual robots
- Ranked top 100 out of over 400 competing teams

MIT BattleCode 2021 |an 2021

- Competed in a team of four developers in a real time strategy AI programming competition
- Taught concepts including Object Oriented Programming, pathfinding, and version control to teammates
- Delegated development tasks among teammates and hosted regular progress check-ins

# **PROJECTS**

# **EpiLog** | *Flutter, Dart, Node.js, Express, Firebase*

Sep 2022 - Present

- Developing a responsive, cross-platform front-end using Flutter and Dart
- Interacting with Express API endpoints to read and write data to a FireStore database
- · Contributing work through weekly team meetings and Git branching

## PalPoll | Node.js, Express, Vue.js, SASS, MongoDB, Mongoose

June - Sep 2022

- Developed a full-stack web application with a REST API and Vue.js front-end
- Wrote middleware to authenticate HTTP requests with JSON Web Tokens
- Implemented mobile-friendly responsive layouts using Vuetify grid system
- Created admin dashboard to add, edit, and delete daily quiz questions

# **AlgoVision** | *HTML*, *CSS*, *TypeScript*

June – Sep. 2022

- Developed a front-end web application to explain and simulate common pathfinding algorithms
- Implemented Dijkstra's Algorithm, Greedy Pathfinding, and A\* in TypeScript to navigate mazes
- Used HTML Drag and Drop API to allow users to create mazes for pathfinding algorithms to navigate

## **ISMordle** | HTML, CSS, Typescript, Node.js, Express

Feb - May 2022

- Developed a full-stack web application spin-off of Wordle using school terminology
- Built Express backend to process requests, used client-side cookies to store player progress
- Received over 6000 unique plays throughout 3 months of development
- Tracked user engagement and game stats using GoatCounter open source web analytics

#### **Dorm Defender** | *Arduino, Arduino C++, ESP32, Node.js, Express*

Feb - March 2022

- Worked with a friend to create a dorm room security system using microcontrollers
- · Programmed an Arduino to detect movement and notify the user with the Gmail API
- Developed a custom GUI library in C++ to create an interactive settings menu
- Built a front-end admin dashboard to view past security logs and edit user information

## Quoridor AI | Python

Jan 2022

- Developed an AI player in 24 hours to compete in a Quoridor board game programming competition
- Implemented A\* pathfinding and minimax backtracking in Python to select the best move
- Won 1st place in both singles and free-for-all tournament brackets
- Tracked user engagement and game stats using GoatCounter open source web analytics

#### **EDUCATION**

#### **University of British Columbia**

Vancouver, BC

Bachelor of Science, Computer Science

Sep 2022 - Apr 2027

Illinois Mathematics and Science Academy

Aurora, IL

High School Diploma

Aug 2019 - June 2022