Stefan Tuczynski

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Technical Skills

Languages: Java, C++, Python, C, C#, HTML, CSS, JavaScript, Typescript
Developer Tools: Git, VS Code, XCode, Unity, React.js, React Native, Node.js, Next.js, Tailwind CSS
Technical: Arduino, Raspberry Pi, STM32, Tinkercad

Experience

Website Manager Sept 2021 – Aug 2023
Crafting for a Cure *Thornhill, ON*

- Updated website using Webflow by implementing changes requested by the charity founder
- Worked with the CEO of Infinidiv to discuss and impliment changes made to the website
- Generated over **$1000** in donations through front-page interface changes

Design Leader June 2021 – June 2023
FTC Team 19946 - Team Titans Robotics *Markham, ON*

- Developed **15+** physical robotic components using OnShape to support team robot
- Lead a mechanical subteam of **5+** people to coordinate the robot's design in under 2 months
- Taught **100+** students CAD and OnShape fundamentals to through weekly workshops

Projects

Wave | *React Native, React.js, Typescript, Google Cloud APIs, XCode* Project Link

- Developed an iOS app helps seniors connect with each other in an interactive way
- Integrated **Google Cloud Translation API** to translate user input into **over 10** languages
- Utilized React Native Voice to transform user voice into text displayed on screen

FinTopia | *C#, Unity, Meta Quest VR* Project Link

- Winner at **Velocity Innovation Challenge: Imagining the Future of Finance**
- Created a user-friendly VR application that encourages financial literacy training
- Developed C# scripts in Unity that kept track of user data and handled logic

PourPal | *C++, STM32* Project Link

- Built a medicine dispenser that administers medicine with **95% accuracy**
- Programmed a 12V pump, ultrasonic sensor, and flow sensor to calculate flow rate

AnimeListApp | *Java, JavaFX* Project Link

- Developed an application that processes **over 16000** Anime datasets
- Implimented Merge Sort and Linear Search to sort and search entry points
- Built application with a full Object-Oriented design
- Generated multiple graphs that adapt to user input and existing data

Autonomous Car | *Python, Raspberry Pi, HTML*

- Developed a controllable and autonomous car that reacts to its environment
- Designed a webpage using HTML that allowed for user-input to control the car
- Used photoresistors and ultrasonic sensors for odometry to calculate relative position

Education

University of Waterloo Sept 2023 – Apr 2028
Candidate for Bachelor of Applied Science in Computer Engineering *Waterloo, ON*

- President's Scholarship
- Relevant courses: Fundamentals of Programming, Project Studio, Linear Circuits, Digital Circuits