https://lawrencetsai.me

Lawrence Tsai

Dear Hiring Manager:

I am beyond excited about applying to work for you! I am currently a fourth-year pursuing a Specialist in Mathematics with Physics applications with minors in Computer Science and Chemistry at the University of Toronto-Trinity College. I am an incoming Software Engineering Intern for Capital One for the summer of 2023 but would like to gain some more experience by working with you this year! Currently, I am working as an information technology assistant for the IT department of 3 biological departments at UofT. I am working in Linux to maintain the robustness and security of our servers and computer architecture. In the summer of 2022, I had the opportunity to work as a Software Engineer at **Promise** Robotics for 4 months in utilizing robotics for automated construction. I utilized Python, Django, React, Docker, Machine Learning, and applied Physics as the top intern contributor. I had the opportunity to work with programming the robots directly as well as full stack development and code reviews with the databases and security of our API. Besides that, I am a senior strategy engineer for the Blue Sky Solar Racing Team at the University of Toronto. I conduct solar cell research (optics and bifacial cells), fabricate, and create simulations (Matlab, Python, Parallel Computing & CAD) to optimize the performance and design of a solar car. I am also on the optics team of the UofT Aerospace Team Space System Division where I do numerical analysis (Python) and optical research (grisms and holographic gratings) of our satellite payload. I am also leading a team of 2 to design tests for our optical bench prototype which is going to be part of a hyperspectral imaging CubeSat to measure anthropogenic gas emissions across Ontario, Canada in 2024. Some projects of mine include a webcam diagnostic tool in coordination with Dr. Etienne Benard-Seguin and Jeremy Moreau (University of Calgary) to diagnose strabismus using OpenCV and mediapipe. Another project of mine that I developed was a friend-making webapp called Amigos using Java, Spring Framework, Figma, Thymeleaf, Javascript, CSS, and **HTML** and deployed on **Azure**. I have some skills but more importantly, have an aptitude for learning that I would like to demonstrate to you. I am a well-rounded person that speaks 4 languages, plays 3 instruments, and played 2 varsity sports (wrestling and track).

Overall, I would like to state that:

- -I have the **Skills:** I am a critical thinker and eager learner with mastery in **Python, Java, and MATLAB**. I am also currently working towards mastering **C** and **C**++ and am working towards a Self Driving Car 4-Course Specialization through the University of Toronto.
- -I have the **Passion:** I spend the bulk of my free time curiously learning on the internet and talking to friends in the field. All part of the fun!
- -I have the **Character:** I am a lighthearted guy. I find pleasure in the connections and conversations in life:)

Sincerely Lawrence (Larry) Tsai (267)-401-2843 L.tsai@mail.utoronto.ca