MATTHEW YU

EDUCATION

University of Waterloo

Honours Mathematics Bachelor Degree
VP of Operations - Residence Council, Reality Labs Design Team ,
MATH 145, CS 145 (Advanced Level Courses)

Dr.G.W.Williams Secondary School

International Baccaureate Diploma Program Math Club Co-President, Game Development Executive

EXPERIENCE

Project: EmpowerBackend developer

Monthly check-ins to ensure dedication and focus on goals

Working inateam to implement a web-scrapper

Mu System Corporation

Summer Internship

Developed aprototypewebscraper to gather competitors using python and beautiful soup

 Worked on industry-wide problems like: Route Optimization and improving item search presenting biweekly

SHAD Summer STEM Program

Design Team Member

Exploring and learningall fields in STEM

 Simulated a professional design team of 5 to propose ideas and prototypes on real-world issues in front of industry professionals. Sept, 2025 - Present Waterloo, Ontario

Sept, 2021 - Present Aurora, Ontario

July, 2024 - Present

Remote

July, 2024 - Augest, 2024

Remote

July, 2024 Online

CONTESTS & ACHIEVEMENTS

Math Certifications of Distinction: Cayley, Fermat, COMC, AMC, CSMC, 2XAIMEQualiferetc...

USA Computing Olympiad: Sliver Division

Online Judges: Hundreds of solved problemsinCodeforces,CSES,DMOJ,Atcoder

Canadian Team Math Competition: Top 6Team

1stPlace at PTC Hacks: Life Under Water(FirstHackathon)

Sept. 2019 - Present Sept. 2021 - Present

Sept. 2021 - Present

April 2024 June 2024

SKILLS

Languages: Java, C++, Python, HTML, Javascript, Typescript, Lua

Libraries & Technologies: React JS/TS, Next JS/TS, Node JS, Express JS, Bash, Terminal, Vim, NoSQL (Firebase & MongoDB), MySQL database, Web Scraping (Beautiful Soup), Tensorflow (Keras), Blender modelling, animating, & rigging Collaboration & Communicating: Git, Slack, Gitbook, Figma, CSS, LaTeX, Manim

SAMPLE OF PERSONAL PROJECTS

MiliBLOCK - Efficient & Customizable Website Blocker

- Utilizes Chrome.Storage API to store past actions done by the user
- . Built Vanilla HTML, CSS, Javascript
- Motivational System, allowing users to stay dedicated to their goals
- Designing Brand and Marketing it on Chrome Web Store, reaching a peak of 8 unique users.

Focus Friend - EEG-Based Focus Detection System

- Accurate readings when one is concentrating though the utilization of Operational Amplifiers strengthening desired signals
- Provides insights through graphs on the application made with React Native using Typescript
- Electrodes and Circuit cover-able by hat creating a discrete design perfect for public places

Your Legacy - In Progress First Person Shooter Game on ROBLOX

- Rigged, animated, designed, modeled View-models and assets on Blender used in game
- Personally Designed and implemented core FPS and Movement mechanics like running, climbing, and wall-jumps
- Server-sided calculations for registering, reliable, bullet hits



