

YIZHOU (JOSEPH) MI

JM.JOSEPHMI@GMAIL.COM | WWW.LINKEDIN.COM/IN/JOSEPH-MI | TORONTO, ON | GITHUB.COM/JOSEPH-MI

CELL: 437-929-3943

Engineering Science, University of Toronto

EDUCATION

September 2023 – Present

University of Toronto Bachelor of Applied Science(BASc) in Engineering Science + PEY Co-op

3.71 Accumulative GPA

- Notable courses include Structures and Materials, Fundamentals in Electric Circuits, Computer Algorithms and Data Structures, and Molecules and Materials
- UTFR DV Mapping and FirmwareTeam, working to develop a driverless vehicle simulation software using Unity
- Technical Volunteer for the Engineering Science Educational Conference, assisting with the annual speaker-student networking event
- Events Executive in UofT's Quantitative Finance Lab, tasked with sending out biweekly newsletters about data science, investments, and finance-related events. Also contribute to the planning of Quant Lab's annual investment case competition.

Short Course: UofT Data Science Mini Course

- Focused on utilizing R, a statistical programming language, to analyze specific data sets and compute trend interpretations.
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EXPERIENCE

Full Stack Developer

ConfiDens Analytics @ confidensanalytics.com · [877-786-3367](tel:877-786-3367) · May 2024 - August Present

- Published location information into the reports page
- Reformatted the frontend Dashboard view to include a clean and comprehensible navigation bar
- Developed the checkout page and corrected our database to record purchases
- Performed API testing and integration to retrieve map data

Mapping and Firmware Engineer

University of Toronto Formula Racing @ University of Toronto · December 2023 - Present

- Conducted BMS integration into current wheel circuit, beginning with research through similar projects, the designing of new component arrangements, and finally product purchasing.
 - Redeveloping the driverless simulation software in Unity
 - Created C# splines library to generate future vehicle path
 - Working on the Docker Container to integrate ROS endpoints, dependencies, and DV source code
 - Reading and Writing CAN messages, RTK correction messages, and Sensor data
 - Assembled corner modules to read wheel specs
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SKILLS

- CAD/Design: SOLIDWORKS, Autodesk Fusion 360, SketchUp, Revit, Simulink
 - Programming: JavaScript, Vue, Python, MATLAB, C, ROS2, C++, Docker, C#, Git
 - Web Dev: React, Vue, Vuex, Laravel, Bootstrap, Tailwind, MongoDB, MySQL
 - Hands-on Manufacturing: Soldering, 3D Printing, Woodworking; Utilizing Milling Machines, Lathes, and Drill Presses
 - Electronic Design and Hardware: Altium, Kicad
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PROJECTS

Stress Analysis of Matboard Bridge

Skills: Python, Matplotlib · November 2023

- Developed Python script utilizing the Matplotlib library to analyze internal stresses in a bridge
 - Implemented advanced algorithms to simulate stress distribution across the bridge, allowing for a comprehensive assessment of failing load, method of failure, and direction of design improvements
 - Designed an intuitive and visually informative output interface, leveraging Matplotlib's capabilities to generate clear stress distribution plots
 - Utilized limited materials and concrete glue to complete construction
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ADDITIONAL INVOLVEMENTS

- Movie Data Retrieval Website Utilizing TMDb's API: Employing Vue Framework via Vue Router
- Mentee, ACE Washington (Dec 2022 - May 2023)
- Firmware Team Member, UTFR(Formula Racing)
- Part-Time Python and Math Tutor, Titan Tutors (Oct 2023 - Present)

AWARDS

- Ranked first within school, Waterloo CSMC 2023
- John Terrence Flanagan Scholarship, Agincourt Collegiate Institute 2023
- UofT Allan Wai Chiu Mok And Isa Po Po Gok Scholarships
- \$14k in scholarships and grants