Tony Lin

(647) 640-5703 | tonylin305@gmail.com | linkedin.com/in/itstonylin | github.com/itstonylin | itstonylin.ca

EDUCATION

Honours Computer Science Co-op (B.A.Sc.) September 2021 – April 2025
McMaster University, 3.8/4.0 GPA *Hamilton, Ontario*

WORK EXPERIENCE

Full Stack Developer September 2023 – Present
McMaster Start Coding *Hamilton, Ontario*
- Developing an Integrated Development Environment (IDE) with React.js, PostgreSQL, Haskell, and Docker for teaching functional programming in Elm.
- Implementing user-centric features, including a highly requested dark mode, to enhance the experience of thousands of students, resulting in a notable increase in user satisfaction and engagement.
- Participating in weekly stand-up meetings and participating in peer code reviews.

Teaching Assistant September 2023 – Present
McMaster University *Hamilton, Ontario*
- Facilitating COMPSCI 2ME3: Introduction to Software Development as a teaching assistant, teaching concepts such as design patterns, interface specifications, Unified Modeling Language (UML), and Software Development Life Cycle (SDLC).
- Assisting students with questions and promptly evaluating assignments for a cohort of 180+ students.

Jr. Software Engineer May 2023 – August 2023
Tech Mahindra *Toronto, Ontario*
- Designed formal specifications for a complex bank mortgage system which increased software reliability and reduced maintenance costs.
- Normalized database schemas in MySQL to reduce data redundancy, saved 10% storage space, and reduced maintenance.

Jr. Software Engineer May 2022 – August 2022
Tech Mahindra *Toronto, Ontario*
- Designed a plugin with UML that uses JUnit to generate unit test cases for Java Spring Boot applications reducing testing time for developers in the organization.
- Conducted research on Agile Methodology, Software Development Life Cycle and different version control tools and presented findings to Tech Mahindra's Digital Transformation and Execution Director.
- Completed Tech Mahindra's courses on modern banking, digital technologies, Junit, Java, and UML.

PROJECTS

Personal Website | *HTML, CSS, JavaScript, Jquery, Bootstrap, Animation Libraries* August 2020 – Present
- A responsive website that visualizes my resume by highlighting my work experience, projects, skills, and awards.

Face Lock | *Python, OpenCV, Fernet* January 2023
- Encrypts and decrypts files/folders with facial recognition using symmetric authenticated cryptography.

Linear Algebralizer | *Elm, Git* January 2022 – April 2022
- A web study tool containing resources on 10 abstract linear algebra theorems.
- Implemented an intuitive UI that allows users to visualize abstract linear algebra theorems through their input.
- Interviewed users and iterated over its design throughout the course of 12 weeks.

Cat Viewer | *JavaScript, Vue.js, Vuetify, The Cat API, Git* February 2022
- Displays paginated images of cats, with filters over 67 different breeds of cats, containing over 8000+ images.

Tip.cc Suite | *Python, PyAutoGUI, Git* May 2021 – July 2021
- Allows users to transfer their entire cryptocurrency portfolio (up to 295 cryptocurrencies) to another Tip.cc account on Discord, auto type in Tip.cc phrase drops, and calculate missing cryptocurrencies in portfolios.
- Automate commands to the Tip.cc bot.

Mahjong Counter | *HTML, CSS, JavaScript, Render, Git* June 2020 – September 2020
- A web application to keep score during Mahjong gameplay, saving 5-10 minutes each game.
- Aggregates and reports 10 statistics including money won/lost, win streaks, and highest win, throughout the game.

TECHNICAL SKILLS

Languages: Java, Python, C, MySQL, PostgresSQL, JavaScript, HTML/CSS, Bash, Elm, Haskell
Frameworks: React.js, Node.js, JUnit, HUnit, Bootstrap, Spring
Tools: Git, VS Code, Jira, Docker, Linux, Unix
Libraries: Matplotlib, OpenCV