

Matthew Mamelak

Toronto, Ontario

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[Personal Website](#)

[LinkedIn](#)

Education

Bachelor of Applied Science – Computer Engineering, Queen’s University, Kingston, ON 2020-2024

- **Principal’s Scholarship**- Awarded to students who achieved an overall average of 95% and above throughout their final year of high school (2020).
- **Dean’s Scholar**- Awarded to students who have achieved a minimum GPA of 3.5 (2021, 2022).

Relevant Courses:

- Fundamentals of Software Development, Data Structures & Algorithms, Computer Architecture, Operating Systems

High School Diploma, Tanenbaum Community Hebrew Academy, Toronto, ON June 2020

Academic Honors:

- Academic Honor Roll Awards at Achievement of Excellent Assemblies. Awarded to students who obtain an overall average of 90% or greater during any academic year (2018, 2019, 2020).
- Danny & Anita Chai Engineering Program Certificate-awarded to students who completed a four-year engineering specialty program in high school (2020).

Work Experience, Extracurricular Clubs & Activities

Operations Automation Analyst, Business Innovation Team May 2022 - Present

Toronto-Dominion Bank (TD), Toronto, ON

- Created three different Microsoft Power App based applications to simplify, automate and confirm (through an audit trail) financial transactions among financial institutions.
- Used Visual Basic (VBA) Macro Programming and Python to develop a sophisticated business control & audit dashboard to allow senior managers to sort and track large data sets and confirm adherence to banking procedures.
- Developed a sophisticated web scraping tool using regular expression (Regex) and the Pandas Library in Python to scrape specific keywords from over 1000 Visual Basic classes and modules.

Consulting Design Team Member

September 2022 - Present

Queen’s Machine Intelligence & Neuroevolutionary Design (QMIND), Kingston, ON

- Working with a scientific research team at the Hospital for Sick Children to predict the location of transcription factor binding sites that regulate human gene expression using machine learning methodologies.
- Responsible for using GitHub, Jira & Confluence to replicate an Agile work environment.

Software Developer

August 2022 - Present

Queen’s Algorithmic Networking & Trading Team (QUANTT), Kingston, ON

- Working with a team of students to develop a simulated stock trading Algorithm in Python through the QuantConnect platform. The algorithm implements a Pairs Trading strategy, as well as Sentiment Analysis to evaluate its positions and make profitable trades.

Software Team Lead

October 2021 – December 2021

Engineering Design & Practice – Emergency Fall Detection Device, Kingston, ON

- Worked with a group of five students to program an emergency fall detection device used to alert an emergency contact if it detects a sudden change in acceleration.
- Oversaw the programming of the sensors, data processing unit, and telecommunication device using Arduino Software.

Software Development Intern

May-September 2021

Custom Biologics, Toronto, ON

- Collaborated with a team of scientists to devise, program, and implement a barcoding strategy to track the analysis of clinical samples for the SARS-CoV2 virus using a point of care diagnostic instrument.
- Developed a user-friendly automation tool through Visual Basic and Microsoft Excel that auto-populates daily and monthly transfers performed.

Computer Languages & Certificates

Computer Language: Python, Java, C/C++, Arduino IDE, SolidWorks, SQL, Visual Basic (VBA), HTML

Certificates: Machine Learning: Hands-On Python and R in Data Science (Udemy), Master Advanced Excel Data & Analytics Skills (LinkedIn Learning), SQL Essential Training (LinkedIn Learning)

References available upon request.