Aaron J. Gaba

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Expected October 2025

#### **EDUCATION**

### Toronto Metropolitan University (formerly Ryerson Univ.)

BEng Electrical Engineering (CEAB/ABET Accredited)

GPA: 3.97 / 4.33

• Relevant Coursework in: Communications, Controls, Analog & Digital IC Design, and Signal Processing

BSc Computer Science (Math Minor)

Major GPA: 3.59 / 4.0

McGill University

Montreal, QC June 2017

Toronto, ON

## SKILLS

Programming Languages: Java, Python, C, Common Lisp, SML, VHDL

Web Development Languages: HTML, CSS, JavaScript

Databases & Database Languages: PostgreSQL, DB2, Redis, SQL, XML Schema, XPath, XSLT Math & Engineering Packages: MATLAB, R, MultiSim, Altera Quartus, Cadence Virtuoso

#### Work Experience

Private Tutor

Mar 2022 – Apr 2025

• Tutored undergraduate students in a variety of math, computer science, and electrical engineering courses at TMU.

### Ohio Public Employees Retirement System (OPERS)

Oct 2017 - May 2019

Programmer Analyst

- · Maintained and implemented new designs in Java-based pension savings programs to reflect changes in Ohio pension law.
- Designed ETL processes for uploading daily bank deposit data into OPERS's accounting system.
- Oversaw the redesign of OPERS's pension data exchange system to incorporate their new pension datastore.
- Automated generation and archiving of Revenue Voucher Treasurer Reports via REST and SOAP services.
- Devised and implemented system integrations for task and workflow automation between legacy Java applications on z/OS and Windows-based SSRS and ECM software.
- Optimized SQL queries in programs and reports, reducing querying time for fund allocation reports by 85%.

#### Notable Projects

# TMU Engineering Capstone Project

- Partnered in the design of an economical, turnkey solution for photogrammetry using smartphone cameras.
- Collaborated in the creation of an automated, smart turntable with an integrated lightbox.
- Designed the turntable's hardware user interface and wrote the microcontroller code that governed the turntable.
- · Modeled the lightbox's initial design with constructive solid geometry and fabricated test parts via 3D printing.
- Constructed ETL processes to simplify 3D model construction with RealityCapture software from smartphone photos.
- Individually awarded the 2025 David Platnick Memorial Award for "demonstrated excellence in design project performance"

#### McGill Work Study Database & Web Client

- Engineered a database-powered solution for McGill University's Work Study application list as a replacement for their 140-page static CSV file posted online.
- Scraped and sanitized 6,370 public financial aid records from McGill's servers.
- Modeled financial aid data and created the corresponding SQL schema.
- Constructed a database API using stored procedures to abstract away the underlying SQL internals from client applications.
- Implemented a full stack web client using Flask, AngularJS, and Bootstrap, which allows students and employers to easily view the status of Work Study applications.