

Columbus, Ohio  
(614) 558-1548  
Citizenship: US & Canadian

# AARON J. GABA

AJGaba.com  
GitHub: ajgabz  
aaron.j.gaba@gmail.com

## SUMMARY

Electrical engineering graduate with previous background in computer science and software development. Experienced with embedded development, microcontrollers, digital communication systems, along with circuit design, simulation, and troubleshooting. Recipient of the 2025 David Platnick Memorial Award for capstone design project performance.

## EDUCATION

<b>Toronto Metropolitan University (formerly Ryerson Univ.)</b>	Toronto, ON
BEng Electrical Engineering (CEAB/ABET Accredited)	October 2025
GPA: 3.97 / 4.33	

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

<b>McGill University</b>	Montreal, QC
BSc Computer Science (Math Minor)	June 2017
GPA: 3.59 / 4.0	

## SKILLS

Programming Languages:	Java, Python, C, Common Lisp, Assembly (MIPS and others), 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

<b>Private Tutor</b>	Mar 2022 – Apr 2025
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- Tutored undergraduate students in a variety of math, computer science, and electrical engineering courses at TMU.

<b>Ohio Public Employees Retirement System (OPERS)</b>	Oct 2017 – May 2019
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*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.