

# HONGDA ZHU

📍 NORTH YORK, M2M4M7 📞 4379875868

## ◦ DETAILS ◦

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## ◦ LINKS ◦

[Linkedin](#)

[Research Paper On Machine Learning](#)

## ◦ SKILLS ◦

Python

Java

Linux, Shell, Bash

PHP

HTML & CSS

JavaScript

Racket

Haskell

React

## ◦ EXTRA-CURRICULAR ACTIVITIES ◦

Sanxian Music Performance:  
Skilled in playing the Sanxian,  
with notable performances at  
the Toronto Dragon Festival and  
with the Toronto Artist Symphony  
Orchestra.

Event Organization: Organized  
a Spring Festival Gala for  
international students as part  
of the CSSA club, fostering  
cultural exchange and community  
engagement.



## PROFILE

Aspiring Data Engineer with strong Python and SQL skills, currently in 4th year at York University. Working as an Application Programmer in the Ministry of Health's Business Intelligence Cluster, specializing in data transformation, automation, and report generation. Experienced in analyzing large datasets and effective teamwork. Passionate about leveraging data engineering to enhance business performance in the financial markets.



## EDUCATION

### Honours Bachelor of Science, York University, Toronto

May 2026

Major in Computer Science, GPA 3.5/4.0; 2023 - 2024 Provost Scholarship recipient



## WORK EXPERIENCE

### Application Programmer at Ontario Government, Ministry of Health, Toronto

April 2024 — Present

- **Data Migration:** Automated data transfer from Oracle to AWS Redshift using Python (cx\_Oracle, Pandas..) and AWS S3, successfully migrating over 30 datasets.
- **Report Generation:** Leveraged IBM Cognos to create and deliver 12 detailed dashboards, providing actionable insights for decision-making.
- **SQL Development:** Wrote and optimized 30+ SQL queries for data extraction, transformation, and loading, improving data accuracy and processing speed.
- **Automation:** Developed Python scripts to automate Excel report comparisons, reducing manual workload by 50%.
- **Collaboration:** Worked in a Scrum team to document findings and issues on JIRA, streamlining project tracking and resolution.



## PERSONAL PROJECT EXPERIENCE

### PHP Student Management System, North York

January 2024 — May 2024

- Implemented secure user authentication and CRUD operations for managing student records using **PHP** and **MySQL**.
- Utilized **AJAX** for real-time updates and **Bootstrap** for a responsive, user-friendly interface.
- Designed and managed a **MySQL** database for efficient data storage and retrieval.
- Enhanced data integrity with **jQuery** form validation and managed user sessions with **PHP** session variables.

### Java Spring Boot CRUD Application, Toronto

January 2024 — March 2024

- Developed a web application with **Java Spring Boot** and **MySQL**.
- Implemented **RESTful APIs** for employee record management and designed a user-friendly interface.

### 2nd International Conference on Computer Graphics, Artificial Intelligence and Data Processing (ICCAID 2022), Machine Learning Researcher, Toronto

September 2022 — May 2023

- Conducted a study on email classification algorithms, enhancing accuracy and published a [research paper](#).
- Partnered with Prof. Nick Feamster to optimize machine learning models using Python and scikit-learn.
- Managed the preprocessing of a 5,172 email dataset, applying advanced techniques for effective model training.
- Evaluated and optimized machine learning models, improving SVM accuracy to 98.17%.