PATRICK LIN →

Computer Science student passionate about bringing software solutions to real-life problems.

📞 *437-985-7939* ✉ *Email* in *LinkedIn* ○ *GitHub*

Education

University of Toronto   **May 2023**
Bachelor of Science in Computer Science (3.72/4.00), Dean's List Scholar   *Toronto, ON*

Relevant Coursework

- Data Structures
- Software Methodology
- Algorithms Analysis
- Database Management
- Machine Learning
- Systems Programming
- Computer Architecture
- Probability & Statistics

Technical Skills

Languages: Java, C++, Python, SQL, R, LaTeX
Developer Tools: Linux, IntelliJ, Eclipse, VS Code
Technologies/Frameworks: Java Spring, AWS Technologies, Jenkins, Git
Interests and Hobbies: Competitive Programming, Sports, Esports, Sound Design, Photography

Experience

Informatica   **June 2021 – June 2022**
Software Development Intern   *Toronto, ON*

- Worked on the development of **Product 360**, tested software features, and reported results to supervisors
- Collaborated with senior engineers to develop custom workflow features for INFA's best-selling **MDM software**
- Implemented various features, bug fixes, and tests using **Java Spring and ReactJS**

Projects

Ticker Trackr | *Python Flask, REST*   *View Project →*

- Winner for **Best Data Visualization** at **Hacklytics**, Georgia Tech's Data Science Hackathon
- Developed a full-stack application within 36 hours that uses the **Twitter, Reddit, and Finnhub APIs** to see how many times stock tickers are being mentioned on social media platforms, allowing users to make informed investing decisions

ArXiv RESTful API | *Java, MongoDB, Docker, AWS*   *View on GitHub →*

- Architected a **Spring Boot**, **MongoDB** public API using the **ArXiv** scholarly article dataset
- **Dockerized** the application and deployed to **Amazon Web Services** using **Elastic Beanstalk**
- Implemented **JWT** authentification using **Spring Security** to prevent unauthorized access to the database

NYC Accidents Database | *PostgreSQL*   *View on GitHub →*

- Developed a database to store and manipulate information on **NYC car accidents** database
- Translated raw data into a well-designed relational schema using **PostgreSQL** & **JDBC**

Student Performance Prediction Project | *Python, PyTorch*   *View on GitHub →*

- Implemented various predictive **machine learning** models to predict the probability of a student answering a question correctly based on previous performance data
- Utilized **kNN**, **Item Response Theory**, **Bagging ensemble** models to achieve 70.7% predictive accuracy

Calendar Application | *Java, Android Studio*   *Software Design*

- Generic calendar application developed in a team of **five** to explore software architecture and design principles

Additional Experience

Top One Education   **2017-2019**
Academic Tutor   *New Jersey, USA*

- Prepared clients for standardized tests such as the SAT, ACT, and Advanced Placement tests

Garden State Tennis Center   **2018-2019**
Tennis Coach   *New Jersey, USA*

- Professional group lesson and freelance tennis coach for over 10 private clients