# Andy Lin

# **EDUCATION**

York University August 2023

BSC Spec Hons. Computer Science (Software Development)

## Relevant Coursework

Courses: Discrete Math, Advanced OOP, Data Structures, Design and Analysis of Algorithms, OS Fundamentals, Software

Design, System Specification and Refinement, UI/UX, Machine Learning

Awards: 4x Dean's Honor List. Graduated With First Class Standing.

# EXPERIENCE

## **Software Developer** | Capstone - LearningOOP

September 2022 - April 2023

- A collaborative capstone project built using Angular, PostgreSQL, and the Spring framework.
- Designed user-friendly web application akin to LeetCode and CodingBat.
- Enhanced it with object oriented programming type questions
- Developed a feature to allow instructors to quickly create problems through a visual interface.
- Developed scripts in the server to run the code the users created and return the results through Kafka.
- ullet Developed  ${f API}$  for transfer of data between client and servers
- Conducted code review sessions.
- Integrated the platform into the school server system, ensuring a secure and efficient user experience.

Teacher Assistant | York University - System Specification and Refinement

September 2022 - April 2023

- Overhauled lab session setup and organization, leading to a 30% increase in student participation and engagement in the laboratory sessions.
- Devised and implemented 4 new laboratory assessments, resulting in a improvement in student performance in understanding complex system specification concepts.
- Conducted 10+ lab sessions, addressing over 50 student inquiries.
- Lead and designed lab tests and enhanced the quality of assessments, resulting in a 15% higher correlation between lab test
  performance and lab assessments.

#### Projects

CrystalOptical | Angular, Spring, PostgreSQL, Gradle

- Led a team of four to develop an eyeglasses **e-commerce** site.
- Implemented key features, including a virtual try-on, seamless purchasing, real-time order tracking, and an integrated online chatbox.
- Implemented security measures by configuring Spring Security to encrypt passwords and manage login tokens.

#### **ArbBot** | node.js, discord.js

- Created a Discord bot that benefits sports betting by leveraging an API to aggregate odds from various sportsbooks.
- Developed a odds command for displaying best odds of plays across multiple sportsbooks.
- Developed a arb command for identifying arbitrage opportunities within or across different sportsbooks.
- Developed a freebet feature for optimizing the conversion of free bet money into unrestricted money.

#### RedPocket | Angular, Spring, MongoDB, Maven

- Designed Redpocket, a web platform inspired by WeChat's Redpacket feature
- Reimagined for users of e-transfers, Venmo, and Cash App. Allowing for users to easily send money in unrestricted ways.
- Redpocket information was saved in Mongodb, allow owners to keep track of who to send money to
- Implemented options for recipients to get portions or receive random values from red packets giving everyone a fun way to send money during new years.

## SKILLS

Languages: Java, JavaScript/TypeScript, HTML/CSS, SQL, Python, C/C++, LATFX

Frameworks and Database: Angular, Git, Spring, SpringBoot, Node.js, Docker, Gradle, Maven, MongoDB, PostgreSQL