

# JOSHUA MAZARIEGOS

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## Education

**Highschool Diploma**, Humber College Institute

Sept 2012 - Aug 2016

**3rd Year Computer Science, Information Security**, University of Toronto

Sept 2016 - April 2020

**Cumulative GPA:** 2.96

## Skills

- Experienced working in a team and individually effectively
- Basic understanding of MySQL coding, relation databases, transactions, database design, and isolation levels inside SQL
- Experienced making web pages using HTML, CSS, and Javascript
- Experienced in object oriented programming in Python, Java, and C
- Experienced implementing Model-View-Controller along with design patterns and regex
- Experienced using different database languages integrated with a frontend such as mongoDB, neo4J, MySQL, SQLite
- Proficient in math, calculus, and linear algebra

## Past Projects

### Paint Program (Java):

- Paint program itself is implemented using MVC
- Painting part of the program is implemented using design strategies such as the factory design pattern for building shapes then strategy design pattern for manipulating shape as its being drawn
- Shapes were implemented using object oriented programming where all shapes are classes and command design pattern was also implemented to be able to do undos and redos so then there was a history of commands of shape manipulating with certain shape objects
- Regex and finite state machine was used to create saves and translate the save file where the save file would be created using an order the regex could understand, then have a finite state machine be able to translate that save file using regex then put those shapes into the paint program

## Current Projects

### Student Helper Webapp (HTML, CSS, Javascript, mongoDB, Spring Boot, Java, Python):

- Created a webpage for the timetable and course search using HTML, CSS, and Javascript
- Created RESTful API endpoints for getting and posting data from our database in JSON format, then having the data interpreted used for enrolling, searching, generating, and maintaining the timetable
- Uses scraped data for the endpoints which are implemented using mongoDB and Spring Boot

### Fingerprinting Authenticator Web API (HTML, Javascript, SQLite, Express.js, Node.js, REACT):

- Working on interpreting all the fingerprint data that gets sent to the database and storing it away linked to a user
- Worked on a email two factor authentication which when you can't be authenticated using your fingerprint, authenticates using an email and updates your fingerprint
- Worked on an authenticator to use fingerprints to authorize access using API endpoints which can be used on any website through our server along with device lookup and deleting

## Languages

**Proficient In:** Python, C, Java, GIT, Latex, Bash Scripting

**Familiar With:** MySQL, noSQL, SQLite, HTML, CSS, Javascript, mongoDB, Spring Boot