# Romeo Paul

#### **SUMMARY OF SKILLS**

- Dedicated and results-oriented Computer Science graduate with a proficiency in a diverse range of programming languages, including but not limited to Java, C, Python, Bash, JavaScript, HTML, SQL, and PHP. Backed by a strong problem-solving background, I provide a versatile skill set and a commitment to excellence.
- Successfully collaborated with group members via GitHub on the development of a full-stack e-commerce website, and integrated algorithms into graphical illustrations for educational use.
- Proficient in working with a diverse array of software and graphical programming languages to achieve project goals.
- Avidly interested in a broad spectrum of computer science and technology fields, highlighting a versatile and adaptable approach to emerging technologies such as artificial intelligence and cloud computing

#### **PROJECT & INITIATIVES**

## Full-Stack Clothing Shop Website

Web Applications (Fall 2023)

- Front-end was designed using HTML, CSS, and AngularJS for SPA (Single Page Architecture)
- Back-end was primarily designed using PHP, MySQL via XAMPP.
- For Drag and Drop effect of shopping items into cart, **JavaScript** was primarily used.
- The security methods that were used for the website are data sanitization to prevent SQL injection, Salted Password Hashing via MD5 hash to improve security by making it more resistant to rainbow table attacks, and error handling.
- All APIs were written in PHP to retrieve data from specific tables in MySQL and return the result in JSON format.
- Collaborated and worked with group members to schedule meetings and plan out extensively on managing workloads and aiming to achieve all project requirements.

### Dijkstra & Bellman Ford Algorithm Illustration for Educational Use

Computer Networks I (Fall 2023)

- Researched and analyzed with group members on both Dijkstra & Bellman Ford Algorithm extensively and created pseudocode to be implemented.
- Used **HTML**, **CSS**, **JavaScript**, **Typescript** along with a react framework to design and implement an illustration that displays and highlights the nodes of a closed circuit and the shorted path being achieved using either the **Dijkstra or Bellman Ford algorithm**.
- Added a table that shows where each node is being traversed through by using HTML and CSS.
- Organized and scheduled group meetups and calls to prioritize and coordinate available times to meet deadlines.

# Zeppelin/Blimp Simulation Graphics

Computer Graphics (Winter 2023)

- Created and constructed a **3D visual model** of a Zepplin using **OpenGL model** transformations and as well as push and pop matrixes via **C language**.
- Added a physics component to the 3D model by enabling it to be controllable using specific keys on the keyboard and situating a camera angle to follow it to gain the appropriate view towards the zeppelin.
- Added a collision detection component where it can aim and shoot a projectile block/cube.
- Added another copy of an enemy zeppelin that moves around randomly in an environment so that the user can shoot projectiles towards it.

### Android Platform Jump Runner Game (Retro Jumper)

Personal (Fall 2022)

- Manipulated textured and rendered presets from Unity Game engine to create a 3D model.
- Created a 3D running platform environment as well physics of a rigid body, gravity and collision detection using C# programming and Unity.
- Designed a visual game menu and implemented music while the game is in play.
- Utilized **Android SDK** to enable GUI buttons for touch screen interface and interactivity as well as testing and debugging it so that it is deployable to the android platform.

#### **EDUCATION**

### Toronto Metropolitan University

Bachelor of Science (Honours) Computer Science

Toronto, ON

- Proficient in a diverse range of programming languages, including Java, Python, Bash, C, Assembly language, SQL, Linux, HTML, CSS, Prolog, PHP, and Elixir.
- Collaborated effectively with team members to create a fully functional e-commerce website using PHP,
  Angular S, JavaScript, HTML, SQL, and CSS via XAMPP.
- Collaborated and worked with group members to design and create a Bingo game in **C** and in **Bash**.
- Collaborated with my peers to create a working database via **SQL, PHP, and HTML**
- Designed a web application along with my teammates via **React, JavaScript, and html** to design a web application that displays the shortest path via **Dijkstra's algorithm and Bell Ford algorithm**.
- Created a simple drawing application using Java (Working with GUI)
- Extensively worked with Rust, Elixir, Smalltalk, and Haskell, showcasing proficiency and knowledge in these languages. As well as developed a Poker game using these languages as a demonstration of practical application and deep understanding.
- Created many small programs in Prolog to gain a deeper understanding of AI development and to learn AI concepts such as Natural Language Processing (NLP).
- Created a functional website using JavaScript, HTML, CSS, and various web tools (Web systems development)
- Actively participated in badminton tournaments organized by the local club at Toronto Metropolitan University, demonstrating a passion for sports and a commitment to physical fitness. Enjoyed the opportunity to compete and engage with fellow students while also balancing academic responsibilities.

### Certifications

AWS Certified Cloud Practitioner (Amazon Web Services): Cloud Computing, AWS Cloud, Amazon Web Services

#### **SKILLS**

• **Skills:** Strategic planning; time management; detail-oriented; collaborative; communicative; supportive; trustworthy; problem-solving; resourceful; patient