Sebastian Lopez Figueroa

672-983-5771 | sebastianlofi@hotmail.com | loppersy.github.io/portfolio/ | linkedin.com/in/sebastian-lopez-figueroa/

Education

University of Northern British Columbia — Prince George, BC

Bachelor of Science in Computer Science — GPA: 3.97/4.33 — *Apr. 2023*

- **Relevant Courses:** Mathematics for Machine Learning, Artificial Intelligence, Algorithm Analysis, Data mining, Computer Networks, Advanced Database Systems, Concurrent and Distributed Programming

Experience

Junior Developer — Apr. 2022 – Aug. 2022

Noratek Solutions Inc — *Prince George, BC*

- Collaborated with cross-functional teams to develop and implement automated testing procedures that ensured the proper functionality of the company's web-based software, improving overall software quality and reliability
- Proactively identified areas for improvement in existing testing procedures, proposing and implementing modifications that reduced delay between test actions and improved testing times by approximately ∼77%
- Documented any bugs found during testing and worked closely with developers to resolve issues, demonstrating strong problem-solving skills and attention to detail

Projects

Mobile Puzzle game | *Unity, C#* — Jan. 2023 – Ongoing

- Developed a mobile puzzle game from scratch as a personal project, learning and applying new technologies and skills through self-learning and online resources
- Led the entire development cycle of a mobile app/game, from ideation and initial concept design to development and publishing on Google Play, with planned continued support and feature updates to enhance the user experience
- Worked on the project independently, putting on "different hats" to tackle new challenges such as coding puzzle mechanics, designing a user-friendly UI, creating all assets in Adobe Photoshop, and making animations

Pac-Man clone with Machine Learning Capabilities | *Python* — Dec. 2022 – Apr. 2023

- Programmed a Pac-Man clone, incorporating new features such as procedural maze generation to create unique levels for each playthrough, and an improved pathfinding algorithm for the ghosts
- Implemented a deep Q-network (DQN) algorithm with TensorFlow to enable Pac-Man to learn from its own actions and rewards, using a neural network to approximate the Q-values for each state-action pair

Co-Creator of Multiplayer Shooter game | *Java* — Sept. 2021 – Dec. 2021

- Collaborated with 3 other students to design and develop a top-down local multiplayer shooter game for a university course, demonstrating strong interpersonal and communication skills in working together towards a shared goal
- Actively participated in troubleshooting and problem-solving throughout the development process, showing adaptability and a willingness to take on challenges as they arose
- Demonstrated effective time management and project management skills, regularly checking in with the team and adjusting priorities as needed to meet project milestones and deadlines

Leadership and Community Involvement

Rotaract Club member and secretary — Sept. 2021 – Ongoing

- Served as a member and secretary of a leadership and community service volunteering club for young professionals, supporting various charitable causes and initiatives to positively impact the local community
- Demonstrated strong organizational and administrative skills in managing club activities, such as scheduling meetings, coordinating events, and maintaining accurate records of club activities

Resident Assistant — Sept. 2022 – Apr. 2023

- Assumed a leadership role as a Resident Assistant, providing support and guidance to students in a dormitory setting to ensure their safety, wellbeing, and academic success
- Demonstrated strong communication and conflict resolution skills in addressing residents' concerns and mediating interpersonal conflicts, resulting in effective problem resolution and improved resident satisfaction.

Technical Skills

Languages: Java, Python, C/C++, SQL, JavaScript, XAML, C#, .NET, WPF, React, CSS, Bootstrap
Developer Tools: Git, IntelliJ, Jupyter Notebook, Unity, PyCharm, Rider, Visual Studio Code, Vim