Joshua Gonzales

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EDUCATION

Bachelor of Applied Science in Computer Engineering **Sep 2020 – Present**
Queen's University, Kingston, Ontario Third Year

- **Relevant Courses:** Engineering Graphics, Engineering Design & Practice I & II, Digital Systems, Computer Architecture, Data Structures, Object-Orientated Programming, Electric Circuits, Electronics I, Calculus I & II, Linear Algebra
- Excellence Entrance Scholarship (90%+ Entrance Average)
- Dean's Honour List (3.5+ GPA)

WORK EXPERIENCE

Laboratory Software Developer **May 2022 - Present**

- Designed experiments and software for the Queen's Visual Cognition Laboratory and played an instrumental role to research on visual search and human attention
- Spearheaded Unity development processes, performance optimization, data input/output, virtual reality software design and implementing test cases
- Developed virtual reality software in C#/Unity planned to gather data sets of 50+ participants to detect saccadic and fixation movements from experiments using in-house scripting and algorithms
- Implemented intermediate Unity concepts including coroutines, addressables, and optimization
- Collaborated with professors, visual designers and lab coordinators to successfully launch experiments

OTHER ENIGNEERING EXPERIENCE

Internet Enabled Interior Car Security System **Nov 2021 – Dec 2021**

- Spearheaded design stages and planned for an inexpensive car security system with a five-person team
- Powered by an Arduino Wi-Fi board with Push Safer API applicable to any Level Zero automated vehicle, and parsed data from a GPS module that supports car owners to locate their stolen vehicle
- Obtained leadership, project management, and time management skills through a design project

Queen's Hyperloop Pod Hall Sensor Tachometer **Jan 2021 – Apr 2021**

- Managed a five-person team to develop a tachometer for the Queen's Hyperloop Design Team
- Designed a Hall Effect Sensor to read motor rotations that improved system accuracy within ±10 RPM at 400km/h velocity, and integrated PLXDAQ to export Arduino data to an Excel sheet
- Established leadership, discipline, and critical thinking skills through a client-based design project

TECHNICAL SKILLS

- **Programming:** Java, MATLAB, C++, C#, C, JavaScript, HTML/CSS, Python
- **Tools:** React.js, Node.js, Expo, Unity, Google Colab, Git, echo3D
- **Designing:** SOLIDWORKS CAD, Figma, Adobe Creative Cloud
- **Platforms:** Arduino, Windows OS, Linux (Ubuntu), Android

ADDITIONAL INFORMATION

- **Languages:** English (Native), French (Basic)
- **Extracurriculars:** Space Engineering Team, Google Development Student Club Solution Team
- **Notable Awards:** First Place in Queen's Next Gen Hackathon, Best Implementation of Blockchain Technology in TOHacks2022, Best in Cloud Computing in CalgaryHacks 2022
- **Website:** https://theoneandonlyone.github.io
- **GitHub:** https://github.com/theoneandonlyone
- **Devpost:** https://devpost.com/theOneAndOnlyOne