KEVIN LIANG

19kl45@queensu.ca I (647) 675-8677 I www.keviniang.com I github.com/Sanbroh I linkedin.com/in/keviniang

PROFESSIONAL EXPERIENCE

Summer Research Student, Reactor Materials Testing Laboratory   **May 2022 – Aug 2022**
- Optimized and programmed features of a beam energy activity calculator with Java, reduced output error from more than 50% to less than 20% using a new algorithm based on Riemann approximation
- Scripted a SRIM/TRIM automation software and an energy optimizer with Python to conduct uniform helium beam research, minimized calculation error to 5% and optimized time to perform ion irradiation experiments with a particle accelerator
- Generated technical reports and software documentations to include in research publications

Robotics Engineer – Special Projects, Wizrobotics   **May 2021 – Aug 2021**
- Managed a team of 3 to create a new summer school program that taught Roblox Lua and attracted 20+ customers
- Developed 4 teaching curriculums for Thunkable, Code.org, Roblox Lua, and App Inventor using Twine
- Created marketing assets and recorded advertisement videos for marketers to publish on social media platforms

EXTRACURRICULAR EXPERIENCE

Chassis Manager, Queen's Hyperloop Design Team   **Jul 2021 – May 2022**
- Managed a team of 7 to design chassis and aeroshell components of a competitive Hyperloop pod with SOLIDWORKS CAD
- Conducted quality assurance and testing procedures with SOLIDWORKS Flow Simulation to gauge performance of designs
- Contributed to technical white papers, safety forms, and presentation slides for competitions

Software Developer, Queen's Technology and Media Association   **Mar 2021 – Mar 2022**
- Programmed the front-end features of Loco, a mobile app that provides tourists with local recommendations with the React Native framework, Expo, and Git version control
- Collaborated with 4 other developers and cross-functionally with product managers, business analysts, and UI/UX designers
- Presented final product to industry professionals and prepared technical support for release on mobile app stores

EDUCATION

Bachelor of Applied Science in Mathematics and Engineering, Queen's University   **Sep 2020 – Apr 2024**
- **Option in Systems and Robotics**: Designed for advanced studies in Systems, Mechatronics, and Electrical Engineering
- **Relevant Coursework:** Data Structures and Algorithms, Coding Theory, Economics and Business Practices, Engineering Graphics, Mechanics, Digital Systems, Computer Architecture, Microprocessor Interfacing and Embedded Systems, Electric Circuits, Electronics 1, Probability 1, Calculus 1-3, Linear Algebra
- **Extracurricular Activities:** Hyperloop Design Team Co-Captain, Startup Consulting Project Manager, Technology and Media Association UI/UX Designer and Software Developer, Space Engineering Team Member

TECHNICAL KNOWLEDGE

- **Programming:** Python, MATLAB, C++, C#, C, Java, HTML, CSS, JavaScript, VHDL, Assembly (Nios 2)
- **Tools:** Microsoft 365, Unity, Twine, Git, Flask, MongoDB, Express.js, React.js, React Native, Node.js, Bootstrap, Expo, Energy2D, LTspice, SRIM/TRIM, Maple
- **Designing:** Figma, Adobe Creative Cloud, SOLIDWORKS CAD, Autodesk AutoCAD
- **Platforms:** Arduino, Windows OS, Linux (Ubuntu), Android

ADDITIONAL INFORMATION

- **Languages:** English (Native), Mandarin (Native)
- **Awards:** 1st place at 2021 QCTF Information Security Competition, Best Use of Cloud Computing at CalgaryHacks 2022
- **Interests:** Playing table tennis, reading books, mentoring, volunteering, inventing new truffle fries recipes