AKSHAR PATEL

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EDUCATION

Bachelors of Science in Computer Science **April 2023**
Minor in Business
Brock University St. Catharines, Ontario
Relevant Classes: Advanced OOP, Algorithms, Robotics
Scholarships & Awards: Brock Scholar Award, Faculty of Mathematics Student Excellence Award

TECHNICAL SKILLS

- Languages: Java, C/C++, Python, HTML5, JavaScript/Typescript, CSS, ARM Assembly
- Frameworks & DB: React Native, JUnit, PostreSQL, Node.Js, Firebase, OpenGL
- AI: Pytorch, Pandas, NumPy, TensorFlow, Jupyter Notebook, OpenCV
- Tools: Git, Google Cloud, Adobe Creative Cloud, Final Cut Pro, Figma, Invision, Notion
- Business: Finance, Accounting, Entrepreneurship, Operations Management

PROJECTS

Geo-Attendance App **December 2021**
[Java, XML, Android Studio, Firebase, Geo-location API]
- Developed a full stack android application using XML for front-end and Java for back-end which used location-based verification and incorporated One-Time-Password authentication to ensure accurate recording of attedance.
- Utilized the power and scalability of Firebase to store and manage student attendance data, ensuring reliable and efficient data management, as well as maintaining real-time location and OTP verification allowing teachers to track attendance efficiently.
- Developed a system that generated course-specific attendance records, providing students and teachers with a comprehensive and organized view of attendance data.

NOTL Museum AR App **January 2023**
[React Native, Unity, ARKit]
- Contributed as a product owner and developer to build an AR app and participated in the design and development process, ensuring the delivery of a high-quality AR application that met the project requirements and exceeded user expectations.
- Utilized React Native to create AR application that leveraged the capabilities of Unity and ARKit for a seamless AR experience. Ensured that application was optimized for performance, compatibility, and user experience across a range of devices.
- Assumed the role of product owner and developer in agile development environment, managing the project requirements and driving the development process to ensure the successful completion and delivery of the AR application.
- Collaborated with the development team to establish project timelines, priorities, and deliverables, and regularly reviewed project progress to identify and resolve any issues or challenges in a timely and effective manner.

Inverted Pendulum on a Drone **February 2023**
[Arduino, C++, Microcontrollers]
- Designed and built a drone for controlling an inverted pendulum, implementing advanced control algorithms including PID control and real-time feedback. Used sensor data and controlling the motors in real-time to achieve the balance of the pendulum.
- Conducted extensive testing and optimization for stability and accuracy, using robust filtering and noise reduction techniques to improve the system's reliability. The drone's performance was optimized through calibration and extensive testing.
- A comprehensive documentation and user manual was created, including schematics, code, and operating instructions, to provide clear and detailed instructions for future use.

VOLUNTEERING AND LEADERSHIP

Brock Computer Science Club (CSC) **January 2018 - Present**
Executive, Projects and competitive Programming
- Event Planning and Organization

Brock Move-in Day Volunteer **August 2022**
Assising new students on move-in day
- Introducing freshman to Brock campus

CLIO App **January 2023**
Team Leader and Product Owner