

Pramsu Pandey

Email: pramsu.pandey@outlook.com

Phone Number: +1 (613) 204-3411

GitHub: github.com/pjontop

Location: Ottawa, Ontario, Canada, 207 Flowing Creek Circle, K2M0K1

SUMMARY

Visionary and exceptionally driven Grade 9 student with an extraordinary passion for leveraging cutting-edge AI/ML and full-stack development to tackle complex global challenges in healthcare and education. Demonstrates remarkable technical leadership through groundbreaking projects including a revolutionary 360 education platform, pioneering AI healthcare prototype "Mesa," and an ambitious autonomous drone system engineered from the ground up. Currently spearheading "Daydream Ottawa," the largest hackathon in the nation's capital, showcasing exceptional organizational leadership and community impact. Distinguished hackathon champion (Nokia winner) with an outstanding 3.9 GPA in the rigorous Pre-IB Program, while simultaneously mentoring peers and fostering innovation across multiple domains. Uniquely combines technical mastery with humanitarian vision to drive transformative change through technology.

TECHNICAL SKILLS

Programming Languages: Python, Java, C, C++, HTML, CSS, JavaScript, TypeScript

Advanced Frameworks: React, React Native, Node.js, Express, TensorFlow, AI/ML, Firebase

Hardware Engineering: KiCad (Advanced PCB Design), Mechanical Engineering, Autonomous Systems Integration

Professional Tools: Git, Docker, GitHub, Advanced Development Environments

Specialized Expertise: Full-stack architecture, cross-platform mobile development, machine learning systems, autonomous robotics, PCB design & fabrication, large-scale event management, technical mentorship & leadership

EDUCATION

High School Student | Ottawa Carleton District School Board | 2021 - Present

- Currently in Grade 9, enrolled in Pre-IB Program | **GPA: 3.9**
- Excellence in STEM subjects with exceptional performance in Science and Math

PROJECTS & TECHNICAL EXPERIENCE

Autonomous Drone Development

Current Project

- Designing autonomous drone system from scratch including PCB design and software development
- Utilizing KiCad for PCB design and implementing autonomous flight control systems
- Integrating hardware engineering with advanced software algorithms for autonomous navigation

360 Education Platform

Current Project

- Developing a comprehensive educational platform aimed at streamlining and enhancing student experiences
- Integrating multiple educational tools and resources into a unified, user-friendly interface
- Focus on improving accessibility to learning resources and simplifying academic workflows for students

Airline Management System

Team Leader & Technical Mentor

- Spearheaded advanced software development project with peer collaboration
- Led architectural decisions and mentored teammates in Java and Python
- Fostered collaborative, growth-focused development environment

Healthcare Management Research - "Mesa" Prototype

Research Leader & Developer

- Designed AI/ML-powered prototype for optimizing medical resource distribution
- Addressed global emergency healthcare inefficiencies through innovative technology

- Authored research paper and proposed implementation strategies

AWARDS & ACHIEVEMENTS

Nokia Hackathon Winner

2024

Recognized for exceptional technical innovation and problem-solving in competitive hackathon environment

Excellent Research Award – Qualia Global Scholars Program (Stanford University)

2022

Recognized for outstanding research leadership and innovation in competitive global summer program affiliated with Stanford University. Received this award for developing "Mesa," an AI-powered healthcare management prototype aimed at improving emergency medical response systems worldwide.

Top 25% – Beaver Computing Contest (BCC)

2023

Awarded national distinction for scoring in the top 25% of participants in a prestigious computer science and logic competition hosted by the University of Waterloo.

Excellence in Social Studies Award

2023

Recognized for exceptional performance in Grade 8 Social Studies, demonstrating advanced understanding of historical, political, and social systems with strong critical thinking and civic awareness.

Top 10% – Kangaroo Math Contest

2021

Placed in the top 10% nationwide in the Kangaroo Math Contest during Grade 6, demonstrating early mathematical talent and analytical reasoning.

LEADERSHIP & EXTRACURRICULAR ACTIVITIES

"Daydream Ottawa" Hackathon Organizer

Hack Club | Current

- **Founding organizer** of Ottawa's premier technology event, orchestrating Canada's capital's largest hackathon
- Masterfully coordinating complex logistics, securing major sponsorships, and curating exceptional participant experiences

- **Pioneering leader** building Ottawa's next generation of innovators while fostering unprecedented collaboration in the regional tech ecosystem

Exceptional Software Development Mentor & Team Leader

Grades 7-9

- **Transformational leader** guiding multiple advanced coding initiatives while elevating peer technical capabilities
- Masterfully mentor teammates across diverse programming languages, architectural design, and best practices
- **Innovation catalyst** fostering collaborative excellence and pushing boundaries of what student teams can achieve

Debate Club - Core Member & Peer Coach

Grades 7-9

- Lead practice sessions and mentor newer members in strategy development
- Engage in high-level debates on complex global and social issues
- Model evidence-based argumentation and real-time critical thinking

Math Club - Competitor & Peer Motivator

Grades 7-8

- Active participant in Canada Jay Mathematical Contest and other competitions
- Led informal study groups to enhance problem-solving skills across the club
- Demonstrated intellectual leadership and commitment to peer development

Sports Leadership

Grades 6-9

- Participated in soccer, Brazilian Jiu-Jitsu, Muay Thai, skiing, and swimming
- Known for taking initiative, adapting to team needs, and encouraging others
- Developed resilience, risk-taking abilities, and situational leadership skills

RESEARCH & ACADEMIC INTERESTS

- **Primary Focus:** Computer Science with specialization in Artificial Intelligence and Machine Learning
- **Research Interests:** Healthcare technology, emergency response systems, data-driven decision making
- **Career Goal:** Leading technology-driven initiatives to improve global healthcare accessibility and efficiency

ADDITIONAL QUALIFICATIONS

- **Mentoring Experience:** Regular informal tutoring in coding languages outside classroom settings
- **Multilingual Capabilities:** Effective communication across diverse team environments
- **Global Perspective:** Participated in international academic programs and competitions
- **Community Impact:** Committed to using technical skills for positive social change

REFERENCES

Brian Sha; Stanford Qualia Global Scholars

“Excellent Research and Great Execution”

Brian.sha@stanford.edu