Aditya Goshalia, B.A.Sc.

Vancouver, BC | 778-877-5915 | agoshalia007@gmail.com | LinkedIn | adityagoshalia.com (portfolio)
U.S. & Canadian Citizen open to relocate

PROFESSIONAL SUMMARY

Biomedical Engineer with 3+ years of work and internship experience across medical technology, clinical informatics, and UAV engineering environments. Experienced developing AI-assisted patient-facing healthcare applications, CAD models and prototypes for medical devices and drone systems, and testing workflows for regulated engineering projects. Strong ability to collaborate with clinicians, regulatory teams, engineers, and business stakeholders in highly regulated environments. Passionate about building practical, scalable technologies at the intersection of engineering, AI, and product development. Dual and U.S. and Canadian citizen open to relocation.

TECHNICAL SKILLS

Programming | Python, Java, C#, R, Minitab, MATLAB
App Development | React Native, Xcode, Android Studio, ArKit, OpenCV
AI & Automation | CoPilot Studio, LLMs, Power Automate
Mechanical Design | SolidWorks, SolidWorks Finite Element Analysis
Healthcare & Regulatory | IEC 62304, ISO 13485, ISO 14971
Tools | 3D Printers (FDM, SLA, PolyJet), Lathe, Mill, Drill Press, Dremel, LaserJet

EDUCATION

The University of British Columbia (UBC) - Vancouver **2018 - 2024**
Bachelor of Applied Science (B.A.Sc.), Biomedical Engineering, Minor in Commerce

- Key Accomplishments: Capstone Project Winner, 16-month Co-op (Internship) Program Graduate
- Relevant Subjects: Clinical Informatics, Bioinformatics, Software for Medical Devices

WORK EXPERIENCE

Biomedical Engineering Associate **May 2025 – May 2026 (Contract)**
Boston Scientific Mississauga, ON

- Developed a patient-facing mobile application with an AI-powered virtual assistant using React Native and CoPilot Studio to support cardiac monitoring workflows and enhance patient engagement
- Supported development of a proposed patient engagement platform estimated to contribute significant market growth opportunities within the cardiac monitoring sector
- Interfaced with Cardiac Technician, Sales, and Regulatory teams to present a business case approved by project VP
- Created SolidWorks models, prototype fixtures, validation documentation, and technical reports to support design reviews, troubleshooting, and next-phase product development decisions for single use sheaths and catheters
- Supported implementation of a mechanical design change that improved torque performance in a steerable sheath, achieving Ppk of 1.17–1.33 with ~95% of parts meeting design requirements

Biomedical Engineering Apprentice **Jan 2025 – May 2025**
Neurocog.ai Vancouver, British Columbia

- Worked with an ophthalmologist at UBC Hospital to develop an iOS gaze tracking app in Xcode using Core ML and ARKit for real-time eye movement tracking to support detection of cognitive disorders

UAV Engineering Apprentice **July 2023 – May 2024**
Stinson Aerial Services Vancouver, British Columbia

- Designed and built a field-deployed aerial seeding tank attached under company drone, building software models in python to evaluate design efficiency (range, speed, tank weight)

Biomedical Engineering Intern **Sep 2022 – May 2023**
Micro-technologies for Quantitative Biomedicine Lab Vancouver, British Columbia

- Designed and fabricated electromechanical systems supporting microfluidic and live-cell imaging research

- Designed and built an anodic bonding station for sealing silicon and glass wafers during microfluidic chip fabrication
- Designed and assembled an environmental enclosure for laboratory microscopes integrating a PLC-controlled CO_2 unit and air heater to support live-cell imaging applications.

PROJECTS

Predicting Sepsis using Machine Learning | Clinical Informatics Project **Sep 2024 – Dec 2024**

- Built and evaluated a Python-based predictive model on clinical time-series data to identify sepsis onset patterns achieving 72% accuracy. Model was presented to principal-investigator collaborating with hospital

Post-Surgical Outcomes in Pediatric Patients | Clinical Informatics Project **Sep 2024– Dec 2024**

- Built an R-based data model to harmonize pediatric postsurgical datasets from a hospital in Ghana, enabling analysis that showed inpatient surgeries averaged 13.6 minutes longer than outpatient cases

Automated Reagent Dispensing System | Capstone Project Winner **Sep 2023 – May 2024**

- Developed an ISO 13485-aligned automated dispensing system for cell culture testing, with a custom GUI for user specific volumes (20-200 µL) and fluid dispensing patterns into a 96-well plate
- Designed, prototyped, and 3D printed SolidWorks components for the dispensing system, applying Design for Manufacture principles to support rapid iteration and functional assembly

Precision Machining a Cell Phone Holder **Sep 2024– Jan 2025**

- Analyzed engineering drawings and machined sheet metal and brass components using lathe, mill, and drill press to fabricate a custom cell phone holder
- Applied automatic feed, edge finding, and precision drilling techniques on the mill for component manufacturing
- Applied face turning and threading techniques on the lathe to manufacture 4 screws for fastening components