ABDUL MOHAMED

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PROFESSIONAL SUMMARY

Creativity and productivity are in my DNA, sharpened at UBC and backed by 7 years of software development. I've spanned the spectrum of abstraction, from raw C and C++ to prompting AI models. Along the way, I cut C++ build times by 30%, automated CI/CD with Docker and AWS, and made stubborn systems work across platforms. When challenges hit, I don't just push harder, I see problems differently and turn them into breakthroughs. Ready to bring that mindset to your team—hire me.

EDUCATION

University of British Columbia
Bachelor's, Computer Engineering

PROFESSIONAL EXPERIENCE

PHIPA-Compliant Real-Time Medical Scribe (Beta)   **Vancouver, BC, Canada**
Software Engineer   *July 2025 - December 2025*
- Orchestrated the takeover of a legacy Laravel (PHP) healthcare application, conducting a comprehensive security audit that remediated 5 critical vulnerabilities and achieved 100% PHIPA compliance by implementing middleware to prevent unauthorized PHI access.
- Led the infrastructure migration from shared hosting to Google Cloud Platform (Cloud Run) using Terraform and Docker, establishing strict data residency controls and reducing deployment time by ~60% via automated Cloud Build pipelines.
- Architected a real-time transcription and automated reporting system using WebSocket, OpenAI, and Google STT to generate instant SOAP notes, reducing latency by ~40% and enabling seamless streaming for long-duration sessions.
- Redesigned the MySQL database schema for audio segmentation and refactored 2,800+ lines of legacy code into a scalable Service-Oriented Architecture, improving query performance by ~30% and enhancing system maintainability.
- Directed the product's beta launch and cost strategy, successfully increasing doctor documentation efficiency by 50% while establishing a sustainable budget model for cloud transcription services.

AbCellera Biologics   **Vancouver, BC, Canada**
C++ Build/Software Engineer   *May 2021 - December 2023*
- Developed Qt/QML data visualization tools that helped scientists analyze research results more effectively, while also contributing improvements and bug reports to open-source projects like vcpkg and the DataFrame C++ library.
- Standardized cross-platform builds with Docker and Vcpkg, cutting build times by 30% and ensuring reproducible environments.
- Designed CI/CD pipelines in Jenkins with distributed AWS build agents, improving reliability and eliminating single points of failure.
- Managed software releases and ported a key product to macOS while beginning the migration from Qt5 to Qt6.

LUCID Vision Labs   **Richmond, BC, Canada**
Junior Software Developer   *June 2017 - May 2021*
- Enhanced the Arena SDK with a more Pythonic API wrapper and utility scripts, streamlining developer workflows.
- Automated tasks like pull request builds, Jira logging, and cross-platform configs, reducing repetitive manual work.
- Built SDK examples, improved the ArenaView UI, and created a ROS2 driver, extending SDK functionality for robotics.
- Designed unit and functional tests with GoogleTest, GoogleMock, and NUnit, achieving 70% code coverage and improving reliability.
- Automated SDK builds, regression testing, and static analysis on AWS through Jenkins pipelines, boosting development efficiency.

PROJECTS & OUTSIDE EXPERIENCE

Simple VPN   **Vancouver, BC, Canada**
                                                                      2024 - 2024
- Built a custom VPN with encrypted tunneling using AES for data confidentiality and Diffie-Hellman key exchange, applying TLS principles to explore secure communication protocols and deepen expertise in networking and cryptography.

Eagle Eyes - AI-Powered GIS Application   **Vancouver, BC, Canada**
                                                                      2025 - 2025
- Developed inventory management system for Flutter-based GIS app integrating OpenAI function calls and natural language workflows
- Enables AI-driven resource tracking and real-time data management for emergency response teams through command parsing.