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   **September 2021 - July 2025**
Bachelor's, Computer Engineering   *GPA: 3.2*

PROFESSIONAL EXPERIENCE

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.

BiteSwipe   **Vancouver, BC, Canada**
                                                                                                       2025 - 2025
- Built a full-stack Android app in Kotlin with a Node.js/TypeScript backend that lets groups vote on restaurants with swipe gestures, integrating Google Auth, CI/CD testing, and cloud deployment on Azure with Docker and Terraform.

SKILLS

Skills: Operating Systems, windows, Linux/Unix, Java, JavaScript, HTML/CSS, Bash, Git, C#, Jenkins, Docker, Python, AWS, Django, Tensorflow, Pytorch, Pandas, Scikit-learn, Keras, TCP/IP, Wireshark, Vim, C/C++, C/C++, Agile, Express.js, Firebase, Flutter, Flask, Gradle, gRPC, JUnit, Jupyter, Kali Linux, Laravel, Machine Learning, Reinforcement Learning, Neural Networks, MongoDB, Mongoose, MySQL, Next.js, Node.js, Nginx, OpenCV, OpenGL, PowerShell, Product Management, REST APIs, Terraform, Web Development, git, Bitbucket, GitHub, JIRA, macos
Languages: Arabic, English