Abdul Rafay Khurram

+1 (236) 865-4820 | rafay@abdulkhurram.com | linkedin.com/in/abdulkhurram | github.com/arkb75

EDUCATION

The University of British Columbia   Vancouver, BC, Canada
Bachelor of Science in Computer Science (Expected Graduation: 2026)

HONORS AND AWARDS

Euclid Mathematics Contest, University of Waterloo   2021
Top 5% Internationally, Certificate of Distinction

EXPERIENCE

Software Engineer   Jan. 2025 – Present
Otto Optical Systems   *Toronto, ON, Canada*
- Building a generative-AI social media platform (Next.js + Express) and recently shipped video, multi-image, and engagement-analytics support across Facebook, Instagram, LinkedIn, and X.
- Hardened the API layer—fixed authentication/session failures and squashed seven critical bugs—raising scheduled-post uptime to 99.9 %.
- Redesigned onboarding and signup flows; A/B tests cut user drop-off by 30 %.
- Created an AI summarisation pipeline that trims prompt tokens by 40 %, backed by AWS DynamoDB and S3 for cost-efficient storage.

Software Developer & Team Lead   Sept. 2024 – Dec. 2024
UBC Emerging Media Lab   *Vancouver, BC, Canada*
- Led development of an AI-powered VR platform simulating clinical scenarios for the UBC School of Nursing.
- Built a secondary AI layer for monitoring patient responses, improving system stability.
- Delivered a functional prototype in two weeks, securing project funding.
- Cut backend costs by 90% through system optimizations, enhancing performance by 40%.

Software Engineer   May 2023 – Sept. 2023
Faaz Consulting   *Maryland, USA*
- Improved UI responsiveness by 30% and added new features using Vue.js and JavaScript.
- Automated deployment processes with Jenkins and Docker, reducing deployment times by 20%.
- Enhanced legacy systems and delivered software updates under strict deadlines.

PROJECTS

SoloPilot – AI Freelancer Pipeline | *Python, LangChain, ChromaDB*   Jun 2025 – Present
- Created a cost-efficient multi-agent platform that plans, codes, tests, deploys, and markets new services in <4 hours while keeping infra spend below $50 / month.
- Added a provider agnostic LLM layer with unified cost and latency logging, enabling one-line model swaps.
- Integrated real time quality gates (ruff, mypy, bandit, eslint) and SonarCloud checks during code generation.
- Integrate Notion MCP as a living roadmap—agents read / write tasks and milestones, giving the LLMs long-term memory that keeps multi-day plans grounded and on track.

Constructify | *Vue.js, Vite, MySQL*   May 2024 – Present
- Built a home-building platform featuring project tracking and a marketplace for service providers.
- Developed a responsive frontend, optimizing load times and user performance.
- Streamlined user onboarding by 25% through targeted UI/UX enhancements.

InsightUBC - Dataset Manager | *React.js, Node.js, REST API*   Sept. – Dec. 2024
- Developed a full-stack web application for managing and analyzing academic datasets.
- Built interactive visualizations with Chart.js, delivering dynamic insights from complex data.
- Implemented Mocha and Chai for backend testing, ensuring robust and error-free performance.

TECHNICAL SKILLS

Languages: Java, Python, JavaScript, TypeScript, SQL, C/C++, Swift, HTML/CSS
Frameworks: React.js, Next.js, Vue.js, Node.js, Express.js
Tools: Git, Docker, AWS (DynamoDB, S3), Chart.js, JSZip, Tailwind CSS
Testing: Mocha, Chai, Unit, Integration, End-to-End, A/B, Fuzz Testing