Adwait Kulkarni

adwait.kul.2018@gmail.com | (604) 720-4861 | Toronto, ON | [LinkedIn](#) | [Portfolio](#)

EDUCATION

B.Sc. in Computer Science, Minor in Data Science   **Sep. 2020 - May 2025**
University of British Columbia (GPA: 3.7/4.0)   *Vancouver, BC*
- Developer in UBC Subsea Robotics and DSCI clubs. Selected for Google's invite-only Software Product Sprint.

WORK EXPERIENCE

Software Developer   **Jun. 2025 – Present**
Tata Consultancy Services (Aviation)   *Toronto, ON*
- Developed cloud-native apps with React.js, Node.js, and AWS in TCS's AI & Cloud unit, supporting 100K users.
- Engineered REST APIs with AWS Lambda, DynamoDB, and S3 for flight operations, reducing latency by 30% and achieving a 99.9% CloudWatch request success rate.
- Assisted in building a virtual chatbot on AWS Connect using Claude LLM and SQS queues, with 90% intent accuracy for 100K+ queries/month.
- Leveraged serverless workflows with Lambda, DynamoDB, and DAX cache for flight disruption notifications, cutting latency from 5 ms to 500 μs for 50K+ real-time events.
- Automated SQL-based defect remediation for DynamoDB data using Node.js + CDK across 20+ services.
- Drove underlying codebase migration from Serverless Framework to AWS CDK for 15+ services.

Full-Stack Developer   **Sep. 2022 – Sep. 2023**
Royal Bank of Canada   *Toronto, ON*
- Improved latency by 25% for 5+ apps by developing Java microservices and Spring APIs with Kafka pipelines.
- Cut config setup time from 10+ mins to 2 for 200 developers with a Spring Web tool across 3 environments.
- Enabled monitoring for 50+ services across 20+ topics with a real-time Kafka-based metadata tracking solution.
- Secured secrets for 20+ applications by migrating YAML-based credential config to cloud-based Hashicorp Vault.
- Led migration of 50+ services across OpenShift and Cloud Foundry platforms, with 0% production downtime.

PROJECTS

MoodMatch AI | *React Native, Expo, Express.js, MongoDB, Node.js, Python, sklearn*   **Jul. 2025 – Nov. 2025**
- Designed a music recommender app using React Native and Python, recommending 500+ songs for 10+ moods.
- Built a content-filtering ML recommender using Scikit-Learn to suggest songs based on playlists and audio features.
- Integrated JWT authentication, playlist management, and recommendations with MongoDB and RESTful APIs.

ClusterVAN | *Python, pandas, Scikit-Learn, Groq LLM, Plotly*   **Jan. 2025 – May 2025**
- Built a business recommender platform for Vancouver by analyzing 300K businesses using unsupervised ML.
- Deployed Groq LLM to provide personal recommendations by analyzing data points over 6 years for 25 locations.
- Set up an interactive Plotly dashboard to visualize 20+ clusters for detailed market analysis, used by 150 users.

TL;DReviews | *React.js, Node.js, Lambda, SageMaker, RDS, S3, Docker*   **Jan. 2025 – May 2025**
- Constructed an AWS pipeline analyzing 6,000+ reviews for 450+ students using the PEGASUS text summarization model on SageMaker, and visualizing results with D3.js.
- Ensured security with AWS Macie, VPC, IAM, Security Groups, and KMS, aligning with CISA and NIST standards.
- Streamlined deployment using automated CI/CD with GitHub Actions and packaged in ECR Docker images.

SKILLS

- **Languages:** Java, Python, JavaScript, TypeScript, Go, HTML/CSS, R
- **Frameworks/Libraries:** Spring Boot, React.js, React Native, Node.js, Express.js, D3.js, pandas, sklearn, JUnit
- **Tools/Technologies:** Apache Kafka, Git, Docker, AWS Services, OpenShift, Cloud Foundry
- **Databases:** MySQL, MongoDB, RDS