**Akshay Kumar Singh**

404, 4 Elsinore Path, Toronto, ON, M8V4G7

[akshay.singh@dal.ca](mailto:akshay.singh@dal.ca); (+1) 9029893331

<https://www.linkedin.com/in/aksingh2>

<https://github.com/Akshay-Kumar>

SUMMARY

Innovative programmer with five years of experience in software industry, pursuing Master’s degree in Computer Science specializing in Data Analytics and Cloud computing at Dalhousie University.

Education

**Master of Applied Computer Science Graduated 2019 - 2021**

Dalhousie University, Halifax, Nova Scotia, Canada

**Bachelor of Technology: Computer Science 7.44 CGPA 2009 - 2013**

Maulana Abul Kalam Azad University of Technology, West Bengal, India

CORE SKILLS

Relational Database - Oracle, MS SQL, MySQL, IBM DB2

No-SQL Database - Neo4j, MongoDB, DynamoDB

Scripting Language - JavaScript, jQuery, Perl, Shell, PowerShell

Frameworks - ASP.NET, ADO.NET, Spring-boot, Android, Node.js, React.js

Languages - Java, C, C#, C++, Python, VTL, HTML, CSS

BI Tools & Softwares - Tableau, J-Report, GitHub, SVN, JIRA, Git-flow

IDE - Eclipse, Netbeans, Toad, MS Visual Studio 2008/10

Financial Crime Prevention Tools - Actimize Visual Modeller, Actimize RCM/ACTONE

PROFESSIONAL EXPERIENCE

**Infosys Limited | Senior Consultant | Mississauga, ON, Canada 2023**

* Redesigned existing AIS custom model to monitor and detect Journaling and Purchase activities.

**Matrix IFS** **| Senior Consultant| Halifax, NS, Canada 2021 - 2023**

* Developed power-shell scripts for automation and execution of Actimize jobs.
* Developed several manual alerts with custom functionality such as field validation and auto population of customer details based on customer id.
* Assisted team to upgraded Actimize Sales practices solution from legacy version 3.0.8 to 4.8.0
* Integrated world-check list into WLF solution and assisted client in upgrading WLF 3.5 to WLX.
* Additionally, also assisted clients with baseline run and pre-post hits comparison after WLX upgrade.

**Matrix IFS** **| Intern | Halifax, NS, Canada 2019 - 2020**

* Designed and developed custom AIS model for alert ingestion from GCP engine and SAS analytics engine.
* Developed model for migration of historical alerts from Norkom to Actimize.
* Developed custom AIS plugin for migration of customer attachments from Norkom to Actimize.
* Developed shell scripts for automation and execution of Actimize jobs.
* Developed several manual alerts with custom functionality such as field validation and auto population of customer details based on customer id.

**Travelex India Pvt Ltd.** **| Senior Analyst | Mumbai, India 2019**

* Designed and developed Entity Matching Solution responsible to Identify unique parties required for AML-SAM (Anti Money Laundering - Suspicious Activity Monitoring) Solution.
* Automated and streamlined the Internal List file generation process, thereby reducing the manual effort by 90%.
* Created Internal list data reconciliation model to perform reconciliation of Internal List data loaded from file into Database and Active tables.
* Designed and developed ETL process for UDM (Unified Data Manager).
* Worked on Actimize Watch List Filtering solution which provides financial institutions with enterprise -wide coverage for screening customers and transactions against sanctions, PEP and internal lists managed by the organization.

**BNP** **Paribas** **| Software Engineer | Mumbai, India & Jersey City, USA 2015 - 2018**

* Improved custom **Trade Blotters** models in Actimize to enable detection of block trades and block splits to fulfilled critical audit recommendation.
* Streamlined the blotter purging process by automating the purging process using Actimize and reduced the manual effort by 90%
* Optimized blotter report distribution process through segregation of data access layer and business logic layer
* Developed suspicious activity monitoring and reporting solutions related to money laundering and terrorist financing with the help of **ACTIMIZE AML SAM** (Suspicious Activity Monitoring) solution provided by NICE Systems
* Developed Fixed Income, Equities and Listed Options On-Demand report using data analytics tool J-Report and PL/SQL
* Interviewed several candidates for the position of Software Engineer and Junior Software Engineer.
* Invited to Jersey City, United States by **BNP Paribas RCC** to receive training on anti-money laundering solution AML-SAM 8 provided by NICE Actimize and to implement the modules for North America region.

**Infosys Limited | Systems Engineer | Bangalore, India 2014 - 2015**

* Utilized the knowledge of Javascript and jQuery to reverse engineer “Manual Alerts” models at Infosys and developed two new manual alerts for the client.
* Designed and developed “BLUE SKY” regulation based model in Actimize in considerably short interval of time without any major defects
* Improved an existing Java based application for the team to compare application’s report and settings data across different servers

ACADEMIC PROJECTS

**Developed a movie watchlist and review web application using React and Flask** **May 2019**

**Class:** Advanced Web Technology

* Designed and developed a movie watchlist web application **MovRev** using React as front end and Flask as back-end.
* Freemium business model was used to ensure most of the features are available freely to all its users except few premium features which could only be accessed through in app purchase.
* MongoDB was selected as the database for the application because if its high throughput, fault tolerance and scalability.

**Developed Learning Management System for educational institutions** **May 2019**

**Class:** Serverless

* Designed and developed a react based application with various modules for an educational institutions such as file processing module, machine learning module, help centre, chat and improved authentication features for improved security.
* The application was developed using serverless technology such as Google functions, Amazon lambda functions, Amazon Amplify, Google Dialogflow. Pub-sub, etc.
* MongoDB was selected as the database for the application because if its high throughput, fault tolerance and scalability.

**AWS app development, containerization and deployment on AWS EC2 using AWS EB** **March 2020**

**Class:** Cloud Computing

* Created **Explore Canada**, a web application based on three-tier architecture to book bus tickets for various tourist destinations across Canada using spring framework.
* The API for the application was developed with spring-boot and the app was containerized using docker and docker image was tested and deployed on EC2 using Elastic Beanstalk.
* API of the application was built using microservice architecture to provide flexibility, scalability and maintainability.

**Developed an android application to enable non-programmers learn programming easily** **Dec 2019**

**Class:** Mobile Computing

* Designed and developed android application **Coding City** to enable students and non-programmers from less privileged parts of the world to learn programming easily in various languages.
* Freemium business model was used to ensure most of the features are available freely to all its users except few premium features which could only be accessed through in app purchase.

ACHIEVEMENTS AND AWARDS

* Received second position at **Government Technology Hackathon** hosted by **Shiftkey labs** for developing **I-Tech** a web application for converting paper and pdf based government forms to web forms along with automated validations. **Nov 2019**
* Received huge applaud at **Diversity Hackathon** for developing **Equity Jobs**, an online service to help organizations hire employees without any gender or ethnic bias. This application will help organizations hire individuals based on merit, hence promoting diversity and equality. **Feb 2020**