Amit Kumar

[linkedin.com/in/akumarroy/](https://www.linkedin.com/in/manish-biyani/)

**EDUCATION**

**The University of Texas at Dallas**, *Dallas, Texas, USA*

*Master of Science in Computer Science, CGPA: 3.82 / 4.0* Aug. 2021 – May. 2023

**West Bengal University of Technology**, *Kolkata, West Bengal, India*

*Bachelor of Technology in Information Technology, CGPA: 8.46 / 10.0* Aug. 2009 – June. 2013

**SUMMARY**

• 8+ Years of experience in software design and development of Object-Oriented Software application development in Java, Python, MySQL, PL/SQL technologies.

• Full Software Development Life cycle (SDLC) experience in Analysis, Design, Development, Implementation, Testing, and

Maintenance.

• Experience in working with REST, Spring, Hibernate and Web Services.

• TDD Test driven development approach using Junit, Mockito framework.

• Back-end Java developer for Data Management Platform (DMP). Building Restful APIs in front of different types of NoSQL

storage engines allowing other groups to quickly access fast data. Experienced in Database design and development, especially performance optimization.

• Expertise in ETL Methods, automation of Data load, extraction and validation using Python scripts.

• Continuous integration and Continuous delivery using Jenkins.

• Proficient in working with Databases like MySQL, PL/SQL, Cassandra and in writing complex SQL queries.

• Strong experience with various application developments IDEs Eclipse, Maven, IntelliJ, Spring Tool Suite (STS), Net Beans and

PyCharm.

• Experience working with versioning tools like SVN and GIT.

• Experience working with Docker, Container and Kubernetes.

• Experience in working with different AWS technologies like EC2, S3, IAM.

• A strong goal-oriented team player and self-starter with a high degree of technical adaptability and good communication skills.

**SKILLS**

**Languages**: Java, Python

**Web Technologies**: CSS, HTML, JavaScript, jQuery

**Operating Systems**: Windows, MacOS, Linux

**Databases**: MySQL, PL/SQL, Cassandra

**Operating Systems**: Windows, MacOS, Linux

**IDE**: Eclipse, Spring Tool Suite, IntelliJ, PyCharm, Visual Studio Code

**Software & System**: Docker, Kafka, SVN, Git

**AWS Services**: EC2, S3

**WORK EXPERIENCE**

**TriNet**, *Dublin, California*

*Software Dev Engineer* June. 2022 – Dec-2022

• Automated template data analysis to simplify “health benefit” selection process during clients & partners on-boarding using Python, Pandas, SQL queries

• Involved in creating REST web-services to facilitate Report generation in Excel format

• Involved in vulnerability fixes of multiple microservices.

• Involved in Analysis, Design, Development, Integration and Testing of application for different modules.

• Providing End to End support for the testing activities during System Testing, UAT.

• Implemented Test Driven development using frameworks like Junit.

Environment: Java 1.8, SQL, Python3, Junit, Maven, GIT, Jenkins, Agile Scrum, Mockito, REST Web Service, Eclipse, Visual Studio Code

, Docker, Kubernetes

**Applied Research Works**, *Kolkata, India* May. 2018 – July-2021

*Technical Manager*

• Lead a team of 9 for Drummond Certification of EHR product.

• Integrated PayPal supported incentive distributions feature in existing Java and REST API based application.

• Designed and developed new User Interfaces supported by enhanced MySQL and Java Back-end to support Case-Management

for US Health-care. This enabled us to on-board multiple new clients on our platform.

• Enhanced our product with multiple new patient facing functionalities that made it easier for the patients to visualize their health metric

and facilitates patient-provider communication.

• Defined and Integrated “Electronic Health Record” feature in the existing product, the new feature results in real time data ingestion

and auto report generation that otherwise took months to reflect in the system.

• Introduced server health monitoring frameworks and other associated improvements to address server stability issues that generate

alarms. This increased product availability and reliability.

• Responsible for the Design, Deploy and development of the client-side applications.

• Involved in requirement analysis, design, coding, and implementation.

• Responsible for the successful execution of Project Planning and Deployment cycles.

Environment: Java 1.8, MySQL, Junit, GIT, Jenkins, Agile Scrum, Mockito, REST Web Service, Eclipse, GIT, Redmine

**Applied Research Works**, *Kolkata, India* Aug. 2017 – April-2018

*Senior Software Developer*

• Developed a feature to periodically augment patient immunization data from CAIR into existing records by facilitating automated

retrieval, processing, and ingestion of data from their platform using Python, Bash and MySQL tools.

• Made improvements in data query and search functionalities by providing Unified User Interface thereby resulting in a less cluttered

user experience and reducing the query time from almost 0.5 minute to 2-3 seconds.

• Extensive experience in writing Procedures, User Data Types, Indexes, Triggers, Functions, Worker events in MySQL For UI

enhancement and Support.

• Developed complex reports on a weekly and monthly basis. Writing Python codes to automate works and reduce manual intervene.

• Expertise in ETL Methods, automation of Data load, extraction and validation using Python scripts.

• Managed performance and tuning of SQL queries and fixed the slow running queries in production with utilities like Explain, Trace,

and Stored Outlines.

• Involved in requirement analysis, design, coding, and implementation.

• Responsible for the successful execution of Project Planning and Deployment cycles.

Environment: Python, Java 1.8, MySQL, Bash, Eclipse, Workbench, GIT, Redmine

**Applied Research Works**, *Kolkata, India* Apr. 2016 – July-2017

*Software Developer*

• Enhanced the existing messaging feature to support one-to-many communication options in addition to one-to-one feature. Added

message filtering options based on date, sender, and receiver roles along with support for different types of file attachment options.

• Developed a periodic patient care reminder and communication workflow based on health metrics and analytic tools using Java and

MySQL.

• Worked with other EHR vendors teams like Elation, Athena to support two-way data sharing and consumption using REST webservices

and webhook.

• Developed a tool in Java Spring to ingest ADT messages and store the information in MySQL database for further processing.

• Supported patient attribution change from User Interface and provisioned for tracking such changes via logs.

• Implemented UI user registration workflow & email notification automation. The process of account creation and login credential

Sharing with the user was added to the existing workflow, removing any manual intervention.

• Implemented Tiny-url algorithm to the product that generates a single use URL and hides the actual URL from the target user.

• Involved in requirement analysis, design, coding, and implementation.

• Responsible for the successful execution of Project Planning and Deployment cycles.

Environment: Python, Java 1.8, Spring, MySQL, Bash, Eclipse, Workbench, GIT, Redmine

**Tata Consultancy**, *Kolkata, India* Dec. 2015 – Mar-2016

*System Engineer*

• Worked on the integration of Swachh Bharat Cess(SBC) across all products under BANCS product of SBI Life Insurance.

• Responsible for the successful execution of Project Planning and Deployment cycles.

Environment: Java 1.8, PL/SQL, Eclipse, SQL Developer, SVN

**UshaComm**, *Kolkata, India* Apr. 2016 – July-2017

*Senior Software Developer*

• Delivered the Policy Charging Rule Function for the client “TelBru” by means of database and core java functionality enhancements.

It enabled the provider to add multiple more service plans for the customers on and above the existing fixed plans.

• Integration of HSBC Payment gateway with the existing web module of TelBru. This was the first time that an ePayment option was.

made available to the customers.

• Worked on the Prepaid to Postpaid porting functionality for the existing customers.

• Worked on optimization of Service plan page load and improved the time from 3-4 minutes to below 10 seconds.

• Involved in requirement analysis, design, coding, and implementation.

• Responsible for the successful execution of Project Planning and Deployment cycles.

Environment: Java 1.5, JSP, XML, XSLT, LUA, IDL, C++, PL/SQL, NetBeans, SQL Developer, SVN

**Course Project**

• **Data-Intensive and Scalable Task Computing (Distributed Computing):**

Designed and developed workflow manager to accept workflow specification from clients and deploy them in the cluster of worker

Nodes using LRU algorithm.

• **Document summarization using NLP – PySpark:**

Implemented Extractive Text summarization technique using Text Rank algorithm.

**• Leader election in asynchronous networks – Java:**

Implemented the Layered-BFS algorithm and simulated its operation in an asynchronous network using java multi-threading and

socket programming. The algorithm is based on Minimum spanning tree in Distributed asynchronous environment.

• **Leader election with termination detection in synchronous networks - Java:**

Implemented the Flood-Max algorithm and simulated its operation in a synchronous network using java multi-threading and

socket programming.

• **Recurrent Neural Networks (RNN) for time-series prediction - Python:**

Implemented Long short-term memory (LSTM) machine learning model using python from scratch with 88% accuracy for weather data.