

# MUHAMMED ALI JOWHER



## Contact

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## SKILLS

- DevOps
- Data Science
- Database Design
- Documentation
- Problem Solving
- Systems Analysis
- Software Testing
- Cloud Computing
- Technical Writing
- Data Warehousing
- Quality Assurance
- Project Management
- Project Management
- Software Architecture
- Agile Methodologies
- Back-End Development
- Software Development
- Web Services & Security
- Full Stack Development
- Front-End Development
- Data Visualization & Mining

## PERSONAL PROFILE

Highly motivated and results-driven Professional Developer with over 6 years of experience in Java, Python, and various other coding languages, I have a strong track record of developing and deploying successful projects. My expertise in data analysis, problem-solving, and software engineering have enabled me to create effective solutions for highly complex projects. In addition to my technical abilities, I bring a creative and flexible approach to problem-solving, allowing me to quickly adapt to ever-changing technologies and environments. I have a strong focus on delivering high-quality results on time and within budget and my experience in leading and working in cross-functional teams and building relationships with stakeholders make me an ideal candidate for this role. I am eager to join an organization that values innovation and creativity.

## STRENGTHS & CAPABILITIES

- Ability to design and develop software using Java, Python, and other programming languages and technology.
- Proficient in front-end and back-end web development solutions using HTML, CSS, JavaScript, Java, and Python.
- Expertise in management and optimization of Amazon Web Services, Microsoft Azure, and Google Cloud Platform cloud resources.
- Professional in Java, Python, and other programming languages for designing and implementing databases, web services, and APIs.
- Skilled in creating user interfaces with React.js, Angular.js, and other front-end technologies as well as creating responsive web designs.
- Strong background in creating data models and developing predictive analytics solutions using Python, R, and other programming languages.
- Experienced in designing and managing databases using SQL, Oracle, and other technology. Skilled in developing data warehouses & data marts.

## PROFESSIONAL EXPERIENCE

<b>Software Engineer</b> Target Corporation, Remote, USA	<b>Sep 2022 - Present</b>
<ul style="list-style-type: none"><li>Ensured best practices were followed and documented new spike story design patterns in Confluence.</li><li>Develop a Python client to interact with an ETL tool, streamlining the data loading process and reducing manual effort.</li><li>Work on Spring Boot multi-module Gradle project &amp; write Groovy test cases, ensuring high code quality and reducing the likelihood of bugs.</li><li>Write ipynb scripts for Target's data compliance team to re-process delete requests for different dates, ensure compliance with data privacy.</li><li>Improve troubleshooting and problem solving by providing multi-threaded access to Kubernetes pod/job logs and consoles in Target's ETL tool.</li><li>Built and enhanced a data catalog tool for Target's data science platform, enabling easy access to data and improving overall data management.</li><li>Create a wrapper devops(Vela) plugin to interact with ETL tool using yaml files as config and published a docker image, simplifying the deployment process and improving overall efficiency.</li><li>Set up Kibana dashboard for API debugging and Grafana dashboard for monitoring application health, integrating ShuttleIO alerts for proactive monitoring of application health.</li><li>Implement automated certificate renewal and alerting for application security, ensuring that all certificates were up-to-date and monitored for any potential security breaches.</li></ul>	
<b>Software Engineer</b> Target Corporation, Bangalore, Karnataka, India	<b>July 2018 - Aug 2021</b>
<ul style="list-style-type: none"><li>Worked on maven microservices architecture projects and added unit tests in Junit.</li><li>Automated the archiving of logs from Oracle Database to Hive tables using Hadoop.</li><li>Built several APIs using Java Spring Boot and wrote unit and integration tests for them.</li><li>Designed and implemented a web application using Java Spring and Hibernate for CRUD operations on tags.</li><li>Created a web application for an intake request form and automated the issue creation process by generating Jira tickets.</li><li>Migrated an ETL tool from JSP framework to ReactJS and ContextAPI and designed and implemented a significant portion of the new UI.</li><li>Developed and added new features to the Automation Portal, which allowed a team of users to own the end-to-end data pipeline and scheduling of workflows.</li></ul>	
<b>Intern</b> Servtire Global, Bangalore	<b>Aug 2017 - June 2018</b>
<ul style="list-style-type: none"><li>Collaborated with team members to develop and implement creative solutions for web applications.</li><li>Assisted with the creation of documentation and other materials to support the development process.</li></ul>	

- Wrote and tested code to ensure that it met quality standards and was compatible with back-end systems.
- Identified and troubleshooted issues with web applications and worked with team members to resolve them.
- Assisted with the design and development of user interfaces using various technologies such as React, HTML, CSS, and JavaScript.
- Conducted research and analysis to gather information that could be used to improve the functionality and user experience of web applications.
- Stayed up-to-date with emerging trends and technologies in front-end development, and shared knowledge with team members to promote continuous learning and improvement.

## PROJECTS

### Spelling correction using ML (Hackathon- Target)

- Implemented sophisticated pre-trained models with existing Python libraries, including Pyenchant, Autocorrect, and Pyspellchecker.
- Developed a Target search term correction app with advanced natural language algorithms, achieving a 92% accuracy rate using the Levenshtein algorithm.
- Demonstrated proficiency in natural language processing, data analysis, and Python programming while consistently meeting or exceeding project expectations.

### Netflix Recommendation System using Machine Learning

- Cleaned and pre-processed large datasets of movies and ratings obtained from Kaggle to prepare them for building a recommendation model
- Built a recommendation model using R programming, specifically implementing user collaborative filtering and item collaborating filtering techniques, resulting in a significant improvement in accuracy from 65% to 93%.
- Demonstrated strong skills in machine learning and programming, particularly in R and data pre-processing.

### Employee leave management system using Spring boot

- As part of my DBMS course during my Masters, I designed and implemented a Leave Management System using Java Spring Boot, ReactJS, and PostgreSQL.
- Utilizing a large employee dataset from Kaggle, I designed the tables and normalized the data into the third normal form.
- Developed the backend using Java Spring Boot, creating several APIs for all CRUD operations and integrating Google authentication for added security.
- Created a user-friendly UI form using ReactJS and styled components to interact with the backend, enhancing the ux.

### TEC- Target Events Calendar

- Worked on a crowd-sourcing project and developed an internal Target events calendar used by 3000 target-wide members.
- Created UI using ReactJS and Worked on the designing and writing SQL's required for Api's.

### Analysis of Three Pointer Over the Years (NBA)

- In this proposed work, NBA stats from 2003-2020 were gathered to understand how the shot patterned evolved throughout these years and find an ideal number of three-pointers to maximize the chance of winning.
- Achieved 85% accuracy using the Random Forest Model.

### Computer Vision and Image Processing

- Designed and implemented an OCR (Optical Character Recognition) system for processing scanned documents using Python
- Developed an image stitching application using OpenCV and Python that allowed users to stitch together multiple images to create a larger, panoramic image. Implemented image alignment algorithms to ensure that the resulting panorama was seamless and distortion-free.

### Location Mapping API (Target)

- Designed and developed a location mapping API service and client during the Dojo bootcamp. The API service allowed users to find all corresponding parent stores for a specific store, while the client was built using Node.js, Jest, Postgres, Docker, Drone, and Kubernetes. The project was completed within a strict timeline and involved collaborating with a team of developers to ensure seamless integration of the service and client.

## EDUCATION

MS in Engineering Science, Data Science University at Buffalo	2021 – 2023
Post Graduate Program in Artificial Intelligence and Machine Learning The University of Texas at Austin - Red Mc-Combs School of Business	2020 – 2021
B.Tech in Computer Science and Engineering National Institute of Technology, Calicut	2014-2018

## HONORS & AWARDS

- ❖ Attained the highest grade in Mathematics during the first semester of my Master’s program, demonstrating my academic excellence.
- ❖ Earned first place in all three rounds of a Hackathon, competing against 200+ Target Corporation employees from India and Minneapolis, by developing a mobile app version of the ETL tool using PWA technology.
- ❖ Contributed over 80,000 lines of code to the ETL front-end Git repository at Target Corporation, earning me the distinction of committing the second-highest number of lines and demonstrating my dedication to the project.
- ❖ Recognized with the Pyramid Monthly Award from Target for my exceptional contributions to UI features and enhancements, highlighting my valuable contributions to the company.
- ❖ Achieved first place twice in team-level hack day competitions at Target Corporation, showcasing my innovative and collaborative approach to problem-solving.

## TECHNICAL SKILLS

**Languages** - JavaScript, Python, Java, R  
**Databases** - Oracle, Apache Hadoop Bigred, Postgres, Mongo DB  
**Tools** - GIT, Jenkins, Docker, Kubernetes, Grafana,Matlab, Maven, Gradle, IntelliJ, Hive, npm/yarn, Kibana, Jira  
**Libraries/Frameworks** - ReactJs, ContextAPI, SpringBoot, Spring MVC, Kafka, JUnit, Pytest, numpy, pandas, scikit, Cypress, XGBoost, sift, opencv