

Akshay Tatyrao Munde

+91 9689600293 | akshay.munde@gmail.com | www.linkedin.com/in/akshay-munde

EDUCATION

Carnegie Mellon University, Pittsburgh, PA, USA

Aug '19 - Dec '20

Master of Information Systems Management (MISM) | CGPA: **3.99**

Maharashtra Institute of Technology, Pune, India

Jul '13 - May '17

Bachelor of Engineering in Computer Engineering | CGPA: **3.72**

WORK EXPERIENCE

Data Scientist, Aetna Insurance LLC (Forbes 500), New York City, New York, USA

Dec'22 - May'24

- Spearheaded the development of a **proprietary data-driven product** aimed at identifying high-performing doctors within a healthcare system, resulting in a projected cost savings of **\$100+ Million** annually across clients
- Deployed product into **production environment**, monitoring its performance to ensure its effectiveness and relevance
- Utilized advanced **statistical testing** methodology and **machine learning algorithms** to extract insights from complex datasets, including patient outcomes, treatment effectiveness, and physician performance metrics
- Designed and implemented **data preprocessing pipelines** to clean, transform, and standardize heterogeneous data sources, ensuring data quality and consistency, resulting in a reduction of data processing efforts
- Collaborated closely with **cross-functional teams** including software engineers, domain experts, and healthcare professionals to gather requirements, iterate on prototypes, and deploy the final product
- Led the development of a sophisticated data analytics project aimed at **quantifying the financial impact** of identifying high-performing doctors within a healthcare system
- Conducted thorough **validation and sensitivity analysis** to assess the robustness of the financial estimates, providing stakeholders with a clear understanding of the confidence level associated with the projected savings
- Developed new metrics and methodology to identify the impact of the product for each plan sponsor by creating **self-service dashboards**
- Developed robust methodologies for evaluating and relevance of new data sources, considering factors such as data quality, availability, and alignment with business objectives, informing decisions regarding data acquisition and integration

Data Scientist, QL2, Baltimore, Maryland, USA

Apr '21- Dec'22

- Reduced the **at-risk revenue by ~\$2M** by **identifying key factors** responsible for client retention using tree based methods and providing account managers with actionable insights
- Saved over **\$30k in monthly testing costs** by improving web scraping performance against anti-bot technology by identifying **causal relationships** between factors responsible for blocking using **A/B testing**
- Enabled **60% faster issue detection** by transitioning the script development process from pull to push-based by providing a **predictive maintenance solution** using clustering (K-Means) and classification (XGBoost) models
- Increased engagement by **12%** on QL2's product platform by creating features around **pricing strategies** - frequency and magnitude of changes, data aggregations, and creating automated alerting systems for actionable insights
- **Lead the analytics team** to create a framework for generating content for the social media to establish QL2 as a **thought leader** in the travel and retail analytics space

Marketing Data Scientist, Musely, Santa Clara, California, USA

Jan '21 – Mar '21

- Developed systems to calculate the **Customer Lifetime Value (CLTV)** for customers acquired through different marketing channels to automate and **optimize the bidding mechanism** used for the channels
- Analyzed the performance of **marketing channels and campaigns** based on survey results and the figures reported by portals of those channels to plan the monthly **marketing budgets**
- Built a **recommendation system** to provide feedback on the channels selected for airing commercials on Linear TV based on the historical performance of the channels

Software Developer, Whitesnow Software Consultancy Pvt. Ltd., Pune, India

Jun '17 – Jan '19

- Designed ERD, SQL tables, and optimized existing queries to filter and fetch data for a Smart city management platform that reduced turnaround times by **30%**
- Curated sprint backlogs and executed user stories through UAT as a developer in an **Agile environment**
- Mentored a team of interns dedicated towards customer success, including bugs triage, analysis, and resolution

Software Development Intern, Quadlogix Technologies Pvt.Ltd., Pune, India

Jun '15 – Jun '16

- Designed an Android application to document the effective working hours of the employees based on time in office
- Generated visual analytics in the form of weekly and monthly reports to understand trends

SKILLS

- Python (SciPy, Scikit-learn, SnowPark, Pyspark), SQL (BigQuery, Snowflake, PostgreSQL), Supervised (Regression, KNN, Decision Trees, XGBoost), Unsupervised (K-means, Hierarchical Clustering, Isolation forest), Dimensionality Reduction (PCA, t-SNE), Jupyter Notebook, Tableau, Apache Spark, Git, AWS, Apache Airflow, Jenkins, GCP