

BHASKAR SHIVAJI KUMBHAR

Tempe, Arizona, United States

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Education

Arizona State University, Tempe, United States

Aug 2024 – Jul 2026

Master of Science in Data Science, Analytics and Engineering

GPA: 3.92/4.0

University of Mumbai, India

Aug 2018 – May 2022

Bachelor of Engineering in Information Technology

GPA: 3.56/4.0

Technical Skills

Languages & Frameworks: Python, SQL, JAVA, Spring Boot, TensorFlow, PyTorch, Docker, Kubernetes, FastAPI

AI/ML and Data Analysis: NumPy, Pandas, Scikit-Learn, RAG, LLMs, MLOps, Vector Databases

Databases & Tools: PostgreSQL, MongoDB, AWS, Google Cloud, Azure, Apache Spark, PowerBI, Tableau, Snowflake

Coursework: Machine Learning, Deep Learning, Adv DBMS, Data Structures, Big Data Analysis, Thesis

Experience

Arizona State University

Jun 2025 – Present

AI Researcher

Tempe, Arizona

- Pioneered an **8-stage LLM pipeline** on 2,000+ semiconductor **plasma-etching** literature pages using **ontology validation & triplet extraction**, reducing manual curation by **95%**, accelerating research productivity.
- Engineered a **physics knowledge graph** refining 12,621 triplets into 2,376 relationships using **OpenAI API & LangChain**, achieving **91%** extraction accuracy, enabling faster literature discovery.

TCR Innovation

Aug 2023 – Jul 2024

Senior Machine Learning Engineer

Remote

- Designed an **ETL pipeline** ingesting data from 10K+ institutions using Airflow & Spark, **unifying multi-format records** & reducing prep time from **24 hrs to 3 mins**.
- Productionized a trend forecasting framework on **10M+** student records using **MLflow & Grafana**, integrating **automated retraining & drift monitoring**, improving enrollment strategies by **35%**.

LTIMindtree

Jun 2022 – Aug 2023

Software Engineer

Mumbai, India

- Architected event-driven microservices using **Java, Spring Boot & Kafka**, handling **200K+ events/day**; implemented **retry, idempotent processing & dead-letter queues**, reducing production failures by **33%**.
- Established a **shared service layer** for request validation and routing, eliminating duplicated logic across services, reducing onboarding time by **40%**, enforcing consistent interaction patterns across backend systems.

Tata Institute of Fundamental Research

Jul 2021 – Apr 2022

Project Intern

Mumbai, India

- Led the development of an automated logistics tracking system using **Django** to achieve **95%** reduction in parcel tracking time.
- Built a **QR-code-based** Android application using **Kotlin** and **REST APIs** to automate **parcel verification**, reducing manual checks by **80%** and enabling real-time tracking across the institute.

Projects

InventoryEdge | Enterprise Sales Analytics & Inventory Optimization Platform

Jan 2026 – Mar 2026

- Built dashboards tracking 30+ sales & inventory KPIs across **500K+** records using **Databricks & Snowflake**, boosting forecasting accuracy by **30%** & reducing overstock by **15%** to drive revenue efficiency.
- Executed cross-functional inventory optimization using **predictive modeling & demand forecasting**, improving decision-making speed by **40%** & allocation accuracy by **25%** to streamline procurement.

FitMetrics | Predictive Fitness Analytics & Performance Dashboard

Aug 2025 – Dec 2025

- Developed **KPI dashboards** analyzing **200K+** fitness records across **25+** performance metrics using **Tableau**, improving workout insight delivery by **30%** to drive personalized fitness strategies.
- Identified high-efficiency workout patterns via **multivariate analysis & trend decomposition**, improving performance decision-making by **35%** to enable data-driven fitness optimization.

InsightSpark | Large-Scale Consumer Sentiment & Rating Intelligence

Aug 2024 – Dec 2024

- Analyzed **10M+** consumer reviews using **Apache Spark & PySpark**, uncovering seasonality trends across distributed pipelines to improve rating prediction accuracy by **23%**, driving strategic business positioning.
- Mapped elite user influence across **100K+** users & **72K+** reviews using **NetworkX & community detection algorithms**, improving platform trust & user engagement by **20%**.

Achievements

- Secured a **\$7,000** academic scholarship at Arizona State University for exceptional merit and scholastic distinction.
- Honored with the **Employee of the Year** at TCR Innovation for boosting revenue by 75% through data engineering.
- Ranked **1 out of 69** in Final Semester Examinations in M.H. Saboo Siddik College of Engineering.