

# Tejas Rajendra Raut

Bellevue, WA | [linkedin.com/in/tejas-raut/](https://linkedin.com/in/tejas-raut/) | [raut.tejas@outlook.com](mailto:raut.tejas@outlook.com) | [rautte.github.io/tejas-profile](https://rautte.github.io/tejas-profile) | (857) 264-8844

## EDUCATION

### Northeastern University

Master of Science in Engineering Management (Data Platforms)

Boston, MA | May 2023

### Vellore Institute of Technology

Bachelor of Technology in Mechanical Engineering (Automotive)

Vellore, India | Apr 2020

## PROFESSIONAL EXPERIENCE

### Software Engineer, CloudBig Technology

Bellevue, WA | Jun 2024 – Present

- Architected event-driven AWS Lambda services processing SNS and SQS notification streams, implementing failure recovery, retry orchestration, and controlled message reprocessing to maintain system correctness under partial failures
- Ingested and materialized high-throughput OpenSearch indices processing over **90M+ records per month**, tuned bulk indexing paths and mitigated write amplification to preserve query latency under load
- Operationalized resilient **error-handling strategies** using SQS visibility timeouts, DLQs, and idempotent consumers, achieving **99.9% success rate** across asynchronous event processing workflows
- Codified CDK-based integration tests and CI/CD pipelines with staged deployments and automated rollback mechanisms to ensure safe releases for production infrastructure

### Data Engineer, Mstry Inc.

Bellevue, WA | Oct 2023 - Jun 2024

- Owned the migration of on-premises data systems to Azure Cloud, redesigning storage layouts and query patterns to improve analytical performance by 35% while **reducing infrastructure costs by 25%**
- Orchestrated Azure-based ETL pipelines processing 2TB+ daily, implementing CI/CD-driven data workflows that **increased deployment throughput by 40%** and **reduced downtime by 30%**
- Developed Python-based data marts and clustering models to support customer segmentation and downstream analytics, increasing marketing engagement by 15% through improved data accessibility

### BI Engineer, Highbar Technologies

Mumbai, India | May 2020 - Jun 2021

- Enabled an **11% revenue uplift** by designing KPI-driven Tableau dashboards and optimizing SAP HANA queries to deliver near-real-time insights across finance and operations teams
- Improved credit and operational **risk modeling accuracy by 20%** by building Python and Excel-based variance analysis and stress testing tools used in investment planning workflows
- Automated financial ETL pipelines using Azure Data Factory, automating reporting workflows to significantly **reduce data refresh latency** and manual intervention

## TECHNICAL SKILLS

**Programming Languages:** Python, SQL, JavaScript, TypeScript, R, Transact-SQL, HTML/CSS

**Data & ML Libraries:** NumPy, Pandas, PySpark, TensorFlow, Scikit-learn, Matplotlib, Seaborn

**Data Platforms & Distributed Systems:** PostgreSQL, MySQL, MongoDB, Azure Cosmos, Kafka, Spark, Hive, Airflow

**Cloud, Frameworks & Tools:** AWS, Azure, Databricks, Snowflake, Git, Node.js, Angular, Tableau, Minitab, MATLAB

## ACADEMIC PROJECTS

### Battleship Multiplayer Web Game (React, TypeScript, Firebase, AWS S3, CloudFront)

Jan 2024 - Apr 2024

- Created a real-time 1v1 multiplayer Battleship web game in React and TypeScript using Firebase for room coordination, turn synchronization, and **fault-tolerant session recovery**, including AI bot logic with hit-streak heuristics
- Engineered a CDN-backed asset pipeline using AWS S3 and CloudFront to serve 240-frame ship animations, optimizing GPU rendering paths and z-layering for **improved runtime responsiveness**

### SyzManiac – Developer Environment Automation CLI Platform (Go, Shell, GitHub)

May 2023 - Dec 2024

- Designed and built a Go-based automation framework to deterministically provision and restore an entire macOS development environment, including dependency installs, versioned dotfile migration, and **lifecycle orchestration** via a custom syz CLI
- Implemented idempotent workflows, fast system state scanning, structured logging, and healthchecks to enable one-command bootstrap and recovery, treating a **developer workstation as a reproducible, self-healing system**