

NEHA SHIVAJI JAGTAP

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EDUCATION

North Carolina State University, Raleigh, NC Aug 2023 – May 2025
Master of Computer Science **GPA: 3.6/4**

Coursework: Design and Analysis of Algorithms, Software Engineering, Database Management Systems

University Of Mumbai, Mumbai, India Aug 2016 – May 2020
Bachelor of Engineering in Computer Engineering **GPA: 9.17/10**

Coursework: Data Structures, Operating Systems, Machine Learning, Computer Networks, Cyber Security

SKILLS

Languages and Databases: Python, Java, JavaScript, HTML5, CSS3, R, SQL, Scala, MySQL, MongoDB, Elasticsearch

Technologies/Frameworks: Node JS, Angular, React, Django, JSON, PHP, XML, Bootstrap, Apache Spark, Apache Kafka, Hadoop, Hive, Azure (Data Factory, Data Lake, Synapse Analytics), Azure DevOps, Docker, Kubernetes, Git, Airflow

Certification: Azure Data Fundamentals DP-900

EXPERIENCE

Teaching Assistant for Database Management Systems, NCSU, Raleigh Aug 2024 – Dec 2024

- **Evaluated** assignments, projects, and exams for **148 graduate students**, focusing on SQL queries and database design principles, **improving student performance by 20%** through detailed feedback and course-related support.

Software Development Engineer Intern, USDA, CA Jun 2024 – Aug 2024

- Developed a unified web portal for scientists to search genomic data, reducing manual retrieval efforts by **88%** and deployed it using Docker.
- Designed and optimized a MongoDB schema to integrate diverse breeding APIs, implementing automated daily cron jobs that ensured **100% data consistency** with delta/incremental updates.

Software Development Engineer, Reliance Jio Infocomm Limited, India Nov 2020 – Jul 2023

- Created and refactored the Rover application with Python and MongoDB, leveraging PySpark scripts to automate tasks such as data loading, aggregation, and joining, resulting in an **97% reduction in manual effort**.
- Automated Tableau administrative processes by integrating APIs for user management, **reducing manual workload by 91%** when adding or removing users from groups and sites.
- Engineered and maintained over 12 ETL scripts to integrate data from Kafka topics, Hive, MongoDB collections, and Hana tables and orchestrated workflows using Apache Airflow, **cutting manual monitoring by 66%**.
- Led the migration of a 16 Python application to Azure Cloud with Azure DevOps, collaborating with the DevOps team and leveraging Kubernetes and Nginx to enhance scalability and **reduce deployment time by 35%**.

PROJECTS

[HerCare](#) (PearlHack 2025 Winner): Built an AI powered Menstrual health platform enabling cycle tracking, AI health assistant, pharmacy locator and virtual gynecologist consultation via WebRTC. Integrated Gemini AI with RAG for personalized insights, built a React.js frontend and Node.js backend and deployed using Streamlit.

PUBLICATION

Land Registration using Blockchain Technology, [IEEE Explore](#) Oct 2020
Proposed blockchain based land registration system which provides a transparent, secured, and decentralized method for execution of transactions between the participants by employing the concept of hyper ledger.

AWARDS

Winner: PearlHack 2025 at UNC, Chapel Hill (Infosys Foundation USA – Best Use of AI) and **DimondHack 2024** at NCSU.

Spotlight Award: For Outstanding Performance and Project Delivery in 2022.