SOHAM CHINCHALKAR

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EDUCATION

M.S. Information Systems **Aug 2024 - May 2026**
Arizona State University **GPA: 4.0 / 4.0**
- Coursework: Advanced Data Analytics, Deep Learning, Statistics, Adv. DBMS, Data in the Cloud, Computer vision, NLP

B.E. Computer Engineering **Aug 2020 - Jun 2024**
Savitribai Phule Pune University **GPA: 3.9 / 4.0**
- Coursework: Data Structures and Algorithms, OOP, Networks, AI, Machine Learning, Data Science

SKILLS

- **Programming & Scripting:** Python, Java, SQL, HTML/CSS, JavaScript
- **Data Analysis & Visualization:** Tableau, Power BI, Statistics, mathematics, data and analysis, Kafka, Spark, Matplotlib, Seaborn, D3.js
- **Libraries/Frameworks:** NumPy, Pandas, Keras, TensorFlow, Flask, PyTorch, Ansible, SAS
- **Databases & Cloud:** MySQL, MongoDB, NoSQL, PL/SQL, Hive, Snowflake, Neo4j, Databricks, Microsoft Azure, AWS S3
- **Interpersonal Skills:** Leadership, financial planning, Problem-solving, Team player, Communication skills

PROFESSIONAL EXPERIENCE

Data Scientist, Rose AI, New York, US **May 2025 – Present**
- Spearheaded automation and delivery of 9 daily analytical chart decks using Python and Apache Airflow, boosting company profits by 12%.
- Extracted, pre-processed, and cleaned financial data from static charts and trillion-record datasets using Automeris, SQL, and Python, preventing a 7% potential revenue loss.
- Collaborated with two of the world's largest banks to embed proprietary financial logic into Rose AI's platform, strengthening enterprise analytics, compliance, and client-specific insights.

Data Engineer, Virtual Galaxy Infotech, Nagpur, India **Feb 2023 – May 2023**
- Developed Python-based ETL pipelines and optimized complex SQL queries for 5 of the largest banks in India, reducing report generation time by 30% and ensuring data integrity for large-scale banking data.
- Assisted senior DBAs in resolving 50+ database errors, reducing downtime by 15%, while collaborating with cross-functional teams to streamline workflows.

Graduate Teaching Assistant, W. P. Carey School of Business, ASU **Aug 2024 – May 2025**
- Created real-time, interactive Tableau dashboards linked to live SQL databases, driving a 25% increase in course offerings.
- Delivered 15+ practical sessions on SQL, Tableau, and machine learning to 200+ students and professionals.
- Assisted faculty with assessment design and grading, improving academic operations by 30%.

RESEARCH PUBLICATIONS AND PROJECTS

Financial Fraud Detection System Using Anti-Benford Subgraphs and ML Algorithms **Oct 2023 – Jan 2024**
IEEE AIKIIE 2023 | Scopus-Indexed Conference | DOI: 10.1109/AIKIIE60097.2023.10390325
- Developed an unsupervised fraud detection system using Anti-Benford graph mining and machine learning, achieving 94.83% anomaly detection accuracy on financial transaction networks.
- Engineered scalable ML pipelines with Pandas, NumPy, and Scikit-learn; accelerated inference through CUDA-based parallelism for high-volume data processing.
- **Patent Published –** *Anti-Benford & Louvain-Based Financial Fraud Detection*, App. No. 202521025821, India, Apr 2025

Keylogger Detection System Using ML Algorithms and Dendritic Cell Algorithm **Jun 2023 – Feb 2024**
First Author | Published in Scopus-Indexed Journal, Revue d'Intelligence Artificielle (IIETA) | DOI:10.18280/ria.380128
- Designed hybrid keylogger detection system integrating the Dendritic Cell Algorithm with SVM and Naive Bayes, achieving 99.8% accuracy on behavior-based threat data.
- Developed end-to-end ML pipelines in Python using NumPy, Pandas, and Scikit-learn, improving detection precision through custom feature engineering and model tuning.
- **Filed a patent for the designed system (App. No. 202421040728, May 2024).**

An LLM Augmented Knowledge Graph System for E-commerce Insights View Project **Feb 2025 – Apr 2025**
- Built a RAG-based system combining LLMs and Neo4j knowledge graphs to extract entities and relationships from structured (100K+ Amazon records) and unstructured (50K+ chat logs) data, enabling semantic NL querying and dynamic graph construction.
- Achieved 98% accuracy in generating relevant, explainable outputs by translating NL queries to Cypher via LLMs and enriching the graph with inferred patterns for actionable insights like product trends and recommendations.

NYC Airbnb Trends & Host Analysis – Interactive Tableau Dashboard View Dashboard **Apr 2025 – May 2025**
- Built a multi-purpose, interactive Tableau dashboard for travellers, travel agents, and property managers, analyzing 48K+ listings using Tableau Prep and advanced features like geospatial mapping, filters, and drill-downs—spotlighting top neighbourhoods with 3,000+ listings and review scores above 4.8.
- Applied data-ink ratio principles for clear visual storytelling, uncovering that 70%+ of listings are managed by multi-property hosts, enabling strategic insights on pricing, guest satisfaction, and host behavior.

ACHIEVEMENTS

- Engineering Graduate Fellowship from Fulton Schools of Engineering.
- 2 Merit based scholarships from Arizona State University.