# SOHAM CHINCHALKAR

+1 (602) 743-3275 | schinch8@asu.edu | Tempe, AZ, USA | LinkedIn | GitHub | Portfolio

### **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

GPA: 3.9 / 4.0

Savitribai Phule Pune University

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 crossfunctional 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.
- Filed a patent for the designed system (App. No. 202521025821, April 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.