SOHAM CHINCHALKAR

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EDUCATION

Master of Science in Information Technology | *Expected May 2026*
Arizona State University, Tempe, Arizona | **GPA 4.22/4**
Coursework: Adv. DBMS, ML in Business, Adv. Data Analytics, Big Data Visualization, NLP, Data Mining, Data in the Cloud.
Bachelor of Engineering in Computer Engineering | *Graduated Jun 2024*
Savitribai Phule Pune University, Pune, Maharashtra | **GPA 3.9/4**
Coursework: Data Structures and Algorithms, OOP, OS, Computer Networks, AI

TECHNICAL SKILLS

- **Programming Languages:** Python, Java
- **Data Analysis Tools:** Tableau, Power BI, Advanced Excel
- **Libraries/Frameworks:** NumPy, Pandas, Scikit-learn, TensorFlow, Flask, PyTorch
- **Data Visualization:** Matplotlib, Seaborn, D3.js
- **Databases:** MySQL, MongoDB, PL/SQL, NoSQL
- **Cloud Platform:** AWS S3
- **Web Technologies:** HTML, CSS, JavaScript

PROFESSIONAL EXPERIENCE

Arizona State University | **Tempe, AZ**
Teaching Assistant | *Aug 2024 - Present*
Key Skills: MySQL, Tableau, NoSQL, database management, Machine Learning

- Administered learning to 200+ students and professionals by running sessions on fundamental skills in SQL, Tableau, and ML Algorithms to facilitate the practical application of these tools.
- Collaborated with professors to design quizzes, graded assignments, and maintain organized student records for efficient course administration.

Virtual Galaxy Infotech Pvt. Ltd. | **Nagpur, India**
Oracle Developer Intern | *Feb 2023 - May 2023*
Key Skills: MySQL, NoSQL, database management, Database Administration, PL/SQL, Oracle

- Developed and optimized SQL queries to efficiently extract data, resulting in a 30% reduction in report generation time.
- Assisted in resolving database transaction errors under senior administration.
- Strengthened cross-functional collaboration and teamwork with engineers and analysts.

RESEARCH PUBLICATIONS AND PROJECTS

Real-Time Temperature Visualization and Simulation (View the project here) | *4 Jan, 2025*

- Built a real-time weather simulation web-based app that visualizes temperature data with interactive graphs and animations. Users can view live weather changes based on current temperature.
- Integrated the weather API to fetch live temperature data and used D3.js, JavaScript and GitHub Pages to make this responsive web-based app update in real time for an interactive dynamic user experience.

An Innovative Keylogger Detection System Using Machine Learning Algorithms and Dendritic Cell Algorithm | *29 Feb, 2024*
SCOPUS Indexed Journal | *Revue d'Intelligence Artificielle / International Information and Engineering Technology Association (IIETA)*
Mentor: Dr. Rachna Somkunwar | No. of Authors: 2 | **DOI: https://doi.org/10.18280/ria.380128**

- The hybrid keylogger detection system was developed by integrating the Dendritic Cell Algorithm with machine learning models, such as SVM and Naive Bayes, to enhance system security and improve the accuracy of detection.
- Implemented the solution using Python and libraries such as NumPy, Pandas, and Scikit-learn, achieving a 99.8% accuracy rate in detecting keyloggers.
- **IPR**: *Patent – Keylogger Detection System*
  Application Number: **202421040728 (Filed: 25 May, 2024)**

A Fraud Detection System in Financial Networks Using AntiBenford Subgraphs and Machine Learning Algorithms,
Final year project | *22 Jan, 2024*
SCOPUS Indexed IEEE Conference | *Ambient Intelligence, Knowledge Informatics and Industrial Electronics (AIKIIE)* | No. of Authors: 6
DOI: 10.1109/AIKIIE60097.2023.10390325

- Built a financial fraud detection system with Python, integrating graph mining techniques based on Benford's Law with unsupervised machine learning algorithm that reached 94.83% accuracy in anomaly detection.
- Utilized NumPy, Pandas, and Scikit-learn for data manipulation and machine learning; and applied **parallelism with CUDA** to efficiently manage large datasets which increased performance while creating inferences.
- **IPR**: *Architecture Copyright – Fraud Detection System*
  Registration Number: **L-138365/2023 (Filed: 14 Dec, 2023)**

AWARDS

- Engineering Graduate Fellowship from Fulton Schools of Engineering | *Aug 2024*
- **2** Merit based scholarships from Arizona State University | *Aug 2024*