# **Soham Chinchalkar**

(SohamChinchalkar/Portfolio) | LinkedIn/SohamChinchalkar | GitHub/SohamChinchalkar

sohamchinchalkar@gmail.com | 602-743-3275

#### **EDUCATION**

#### Arizona State University – MS in Information Technology

May 2026

**Coursework**: Advanced Database Management Systems, Machine Learning in Business, Advanced Data Analytics, Big Data Visualization, Natural Language Processing, Information Systems Development, Data Processing at Scale, Data Mining, Data in the Cloud.

Dr. D. Y. Patil Institute of Technology - B.E. in Computer Engineering

CGPA 9.54/10.00

Graduated Jun 2024

#### **TECHNICAL SKILLS**

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

#### PROFESSIONAL EXPERIENCE

Arizona State University Tempe, AZ

Teaching Assistant Aug 2024 - Present

#### Key Skills: MySQL, Tableau, NoSQL, database management, Machine Learning

- Administered learning to 150+ students and professionals by running sessions on fundamental skills in SQL, Tableau, and ML Algorithms to facilitate the practical application of these tools.
- O Collaborated with professors to create quizzes, keeping questions aligned with course objectives and learning outcomes.
- O Sorted out course administration by being fair in the grading of assignments and kept organized records of student databases for efficient tracking.

### 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

- O 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**

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 research addresses privacy and security challenges, particularly focusing on detecting software keyloggers using a hybrid system
  that combines the Dendritic Cell Algorithm (DCA) with Machine Learning Algorithms (MLA) to improve detection accuracy.
- The proposed system, especially the SVM-NB-DCA approach, demonstrated high effectiveness, achieving an accuracy of 99.8% in keylogger detection, highlighting its potential as a robust solution for enhancing system security against keyloggers.

## 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:** <u>10.1109/AIKIIE60097.2023.10390325</u>

- The research addresses financial fraud detection in banking systems by combining graph mining based on Benford's Law with unsupervised Machine Learning Algorithms (MLA) to reduce false positives and enhance accuracy.
- The Fraud Detection System, leveraging Benford's Law and MLA, achieves a 94.83% accuracy rate in detecting anomalies, contributing significantly to early fraud detection and improving financial security.

#### **INTELLECTUAL PROPERTY RIGHTS**

#### **PATENT – KEYLOGGER DETECTION SYSTEM**

25 May, 2024

Application Number: 202421040728

ARCHITECTURE COPYRIGHT - KEYLOGGER DETECTION SYSTEM

9 Oct, 2023

Registration Number: L-134509/2023

#### ARCHITECTURE COPYRIGHT – FRAUD DETECTION SYSTEM

14 Dec, 2023

Registration Number: L-138365/2023

#### **AWARDS**

Engineering Graduate Fellowship from Fulton Schools of Engineering

Aug 2024

2 Merit based scholarships from Arizona State University

Aug 2024