

# Soham Chinchalkar

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## EDUCATION

<b>Arizona State University – MS in Information Technology</b>	May 2026
<b>Coursework:</b> 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.	
<b>Dr. D. Y. Patil Institute of Technology - B.E. in Computer Engineering</b>	CGPA 9.54/10.00
<b>Coursework:</b> Data Structures and Algorithms, OOP, OS, Computer Networks, AI	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
- **Data Visualization:** Matplotlib, Seaborn, D3.js
- **Databases:** MySQL, MongoDB, PL/SQL, NoSQL
- **Cloud Platform:** AWS S3

## PROFESSIONAL EXPERIENCE

<b>Arizona State University</b>	Tempe, AZ
<i>Teaching Assistant</i>	Aug 2024 - Present
<b>Key Skills:</b> MySQL, Tableau, NoSQL, database management, Machine Learning	
<ul style="list-style-type: none"><li>○ 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.</li><li>○ Collaborated with professors to create quizzes, keeping questions aligned with course objectives and learning outcomes.</li><li>○ Sorted out course administration by being fair in the grading of assignments and kept organized records of student databases for efficient tracking.</li></ul>	
<b>Virtual Galaxy Infotech Pvt. Ltd.</b>	Nagpur, India
<i>Oracle Developer Intern</i>	Feb 2023 - May 2023
<b>Key Skills:</b> MySQL, NoSQL, database management, Database Administration, PL/SQL, Oracle	
<ul style="list-style-type: none"><li>○ Developed and optimized SQL queries to efficiently extract data, resulting in a 30% reduction in report generation time.</li><li>○ Assisted in resolving database transaction errors under senior administration.</li><li>○ Strengthened cross-functional collaboration and teamwork with engineers and analysts.</li></ul>	

## RESEARCH PUBLICATIONS AND PROJECTS

<b>An Innovative Keylogger Detection System Using Machine Learning Algorithms and Dendritic Cell Algorithm</b>	29 Feb, 2024
SCOPUS Indexed Journal   <i>Revue d'Intelligence Artificielle / International Information and Engineering Technology Association (IIETA)</i>	
Mentor: Dr. Rachna Somkunwar   No. of Authors: 2 DOI: <a href="https://doi.org/10.18280/ria.380128">https://doi.org/10.18280/ria.380128</a>	
<ul style="list-style-type: none"><li>○ 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.</li><li>○ 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.</li></ul>	
<b>A Fraud Detection System in Financial Networks Using AntiBenford Subgraphs and Machine Learning Algorithms,</b>	
<b>Final year project</b>	22 Jan, 2024
SCOPUS Indexed IEEE Conference   <i>Ambient Intelligence, Knowledge Informatics and Industrial Electronics (AIKIIIE)</i>   No. of Authors: 6	
DOI: <a href="https://doi.org/10.1109/AIKIIIE60097.2023.10390325">10.1109/AIKIIIE60097.2023.10390325</a>	
<ul style="list-style-type: none"><li>○ 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.</li><li>○ 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.</li></ul>	

## INTELLECTUAL PROPERTY RIGHTS

<b>PATENT – KEYLOGGER DETECTION SYSTEM</b>	25 May, 2024
Application Number: 202421040728	
<b>ARCHITECTURE COPYRIGHT - KEYLOGGER DETECTION SYSTEM</b>	9 Oct, 2023
Registration Number: L-134509/2023	
<b>ARCHITECTURE COPYRIGHT – FRAUD DETECTION SYSTEM</b>	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