

SMRUTI SINGH

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EDUCATION

University of Illinois, Urbana-Champaign

Master Of Science in Information Management

Relevant Coursework: Data, Statistical Models and Information, Data Warehousing and BI, Methods of Data Science.

Aug 2024- May 2026

GPA- 4.0/4.0

Thakur College Of Engineering and Technology, Mumbai, India

Bachelor of Engineering in Information Technology

Relevant Coursework: Databases, Management Information Systems, Operating Systems, Web Programming, Natural Language Processing.

Aug 2018- May 2022

GPA- 9.16/10

TECHNICAL SKILLS

Languages: Python, R, SQL, JavaScript, HTML, CSS, Scala, C/C++, Shell Scripting **Databases:** MySQL, MongoDB, Postgres, MS SQL Server

Big Data & ETL: PySpark, Airflow, Kafka, Hadoop, AWS (S3, Lambda), Snowflake, Docker

Data Analytics: Tableau, Power BI, Pandas, NumPy, Matplotlib, Seaborn, K-means, TensorFlow, PyTorch

Other Tools: Jupyter Notebook, Kubernetes, Rest API, JSON, Git, Splunk, Jenkins

Statistical Models: Regression (Linear, Logistic), Classification, ANOVA, Correlation, T-test, Predictive Modeling, Hypothesis Testing

WORK EXPERIENCE

ARCON Tech Solutions

PAM Security Engineer

Mumbai, India

Jun 2022- Jun 2024

- Enhanced security measures by reducing unauthorized access incidents by **40%**, through implementing and maintaining **Privileged Access Management (PAM) solutions**, including Multi-Factor Authentication and Password Vault
- Maintained **99.9% system uptime**, by working with **load balancers, database clusters, and disaster recovery servers** to ensure high availability and fault tolerance.
- Improved security configurations by identifying anomalies through **analyzing system logs and user access patterns**, collaborating with cross-functional teams
- Boosted **data ingestion efficiency** by **35%**, by designing and optimizing ETL pipelines for structured and unstructured data
- Enhanced **decision-making** by creating **interactive Power BI dashboards**, improving visibility of onboarding status
- Conducted **UAT testing and root cause analysis** on data inconsistencies, reducing **data onboarding errors** by **25%**
- Integrated **AWS cloud services (S3, Lambda)** to manage and process over **1TB** of video logs, improving accessibility and operational efficiency
- Engineered **SQL-based scripts** for real-time monitoring of onboarded assets, improving accuracy and minimizing onboarding issues by 20%

The Intern Academy

Project Intern

Mumbai, India

Oct 2021-Nov 2021

- Automated real-time security alerts using **Python scripts** with **REST APIs** to automate real-time security alerts, reducing notification delays
- Simplified **manual workflows** by implementing an **Apache Airflow-based automation framework**, cutting down repetitive tasks by **75%** and improving operational efficiency
- Led **Agile processes** (stand-ups, sprint planning) to ensure timely delivery of data pipeline and security automation projects

ACADEMIC PROJECTS

Climate and Health Data Analysis

Feb 2025-Present

- Performed **exploratory data analysis (EDA)** on climate and health datasets, identifying trends, correlations, and seasonality using Python (**Pandas, NumPy, Matplotlib, Seaborn**).
- Conducted **data preprocessing and transformation**, handling missing values, outliers, and inconsistencies to ensure accurate analysis for **statistical modeling** and forecasting.
- Developed **predictive models** and **time series forecasting** to analyze the impact of climate factors (temperature, pollution) on health outcomes using **ARIMA, LSTM**.

Holiday Impact Analysis

Oct 2024 – Dec 2024

- Analyzed survey data to identify key drivers of consumer attitudes using **regression analysis** and **correlation**
- Built ETL pipelines using Python (**Pandas, NumPy, PySpark**) to process **5M+** sales records, enabling trend analysis across four retail categories
- Created interactive dashboards in **Tableau**, analyzing holiday sales impact and helping stakeholders optimize **marketing and inventory strategies**, increasing revenue by **15%**.

EDUFUN- Enhancing Conceptual Proficiency

Aug 2021– Jun 2022

- Crafted **responsive front-end web pages** using **HTML, CSS, and PHP**, improving user experience and reducing page load time by **30%** for **500+** active users.
- Innovated **MySQL database schemas**, reducing query retrieval time and improving content access speed for **10K+ educational records**
- Integrated **NLP techniques** to analyze and categorize **textual content items**, enhancing adaptive learning and boosting content personalization

ACHIEVEMENTS

- First Prize:** Paper Presentation on "Enhancing Conceptual Proficiency," highlighting data-driven models in education (*Mar 2022*)
- Winner:** Technical Paper, "Dark Abyssal Side of Dark Web," at MULTICON-W [ICICN], focusing on deep web analytics (*Feb 2019*)
- Subject Curriculum Head:** Designed question papers and evaluated answers at an NGO(ICHCHHA), improving structured learning
- Certificates:** Google Data Analytics, AWS Certified Cloud Practitioner, HackerRank SQL(Intermediate)