Gaganjot Kaur Shan

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COMPUTER SCIENCE ENGINEERING

Data Science enthusiast with 1.5 years experience in machine learning, system optimization, and data security. Skilled in analytics, visualization, and software engineering. Known for proactive problem-solving and delivering high-quality results.

EXPERIENCE

Data Science and Security Research Intern

SAP Labs   **March 2023 - August 2023, FR, Mougins**

· Developed a SAP Fiori (UI5) app integrating ledger technologies and REST-APIs, enhancing UX for security in next-gen analytics.
· Enhanced scalability by containerizing the project with Docker and deploying on Kubernetes (Kyma) clusters.
· Improved robustness through debugging existing modules and collaboratively implementing advanced security features.
· Utilizing ML-based synthetic data generation techniques to preserve privacy, increased KPI anomaly detection accuracy upto 5.42%.

Software Engineer Intern

Diesel Loco Modernisation Works, Indian Railways   **June 2018 - August 2018, IN, Patiala**

· Engineered a custom application-layer class with Python sockets for optimizing network communication.
· Achieved up to a 3% improvement in system responsiveness by optimizing data transmission latency.
· Partnered cross-functionally to diagnose and rectify software development challenges efficiently.
· Delivered presentations translating technical details into actionable insights for stakeholders.

Data Science and Mathematics Intern, Young Talent Nurture

Indian Institute of Space Science and Technology   **May 2017 - June 2017, IN, Thiruvananthapuram**

· Built a predictive model using machine learning and statistical analysis, boosting equipment failure forecasting by 2-5%.
· Visualized and analyzed over 50,000 data points in datasets, identifying trends and patterns with SQL and Tableau.
· Engaged in advanced mathematics lectures to cultivate pathological questioning and problem-solving skills.

PROJECTS

Oscillatory Neural Network for Voice Spoofing Detection

EURECOM · www.canva.com/design/DAFao0oWuuk/DEoVidx7jjQZxpb7F5xkJg/view · September 2022 - February 2023

· Assessed the efficacy of the model in mitigating the EVGP through benchmark assessments.
· Innovated and optimized the coRNN architecture for synthetic speech detection on ASV spoof 2019 logical attacks database.
· Significantly boosted model performance by 1.9 percentage points, resulting in a best equal error rate of 6.8%.

Event Causality Detection using NLP

EURECOM · gitlab.eurecom.fr/shan/event_detection · January 2022 - June 2022

· Attained an 85% accuracy rate on "SemEval-2010 Task 8" building a data-oriented neural network for event detection.
· Analyzed, processed, and visualized over 10,000 event-related data points, integrating word embeddings for enhanced performance.
· Engineered a scalable and maintainable codebase, adhering to software engineering best practices.

EDUCATION

Masters of Science in Data Science and Engineering

EURECOM · Biot, France · 2021-2023 · 3.62/4

Bachelors of Engineering Computer Science and Engineering

Chandigarh University · Mohali, India · 2016-2020 · 7.95/10

CERTIFICATIONS

BCG Data Science Job Simulation

Forage · 2024

Power BI Essential Training

LinkedIn Learning · 2024

SKILLS

Machine Learning: Python Programming (TensorFlow, PyTorch, Keras), NLP (Word2Vec, nltk), Data Analysis (Pandas), Predictive Modelling, Statistical Modelling (Scikit-learn), Data visualization (Tableau, Power BI, matplotlib), SQL

Web Dev: HTML5, CSS3, JavaScript

Tools & Platforms Used: PowerBI, Docker, Postman, Git, Kyma (Kubernetes), AWS (compute services)

Languages: English(C1), French(A1), Hindi(C2), Punjabi(C2)

Hobbies & Interests: Bouldering, Gardening, Strategy Games, Cooking, Swarm Intelligence, Ecology