Kunal Sood

Data Scientist | New Delhi, India

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Skills

Languages: C/C++, Python, Bash, MySQL

ML & Data Science: Scikit-learn, NumPy, Pandas, SciPy, NLP

Computer Vision: OpenCV, Keras, TensorFlow, Deep Learning, Scikit-Image

Visualization: Matplotlib, Seaborn

Technologies & Tools: BigQuery, GCE, Cloud Storage, GitHub, GitLab

Professional Skills: Leadership, Program Management, Product Management, Project Management, Community Building, Public Speaking, Stakeholder Engagement

Work Experience

Data Science Intern | DRDO, New Delhi | Aug 2025 – Jan 2026

- Engineered adversarial neural networks (TensorFlow/PyTorch) to bolster encryption robustness, achieving 100% training and testing accuracy for Bob (authorized receiver) while constraining Eve (adversary) to ~60% training accuracy and ~50–55% testing accuracy.
- Analysed cipher-text and plain-text datasets to identify security patterns and improve cryptographic learning efficiency.
- Implemented and optimized encoder-decoder-attacker architectures with custom loss functions for adversarial resistance.

Machine Learning Engineer | Omdena, Remote | Jan 2025 – Apr 2025

- Compiled and pre-processed a unified corpus of 60,000+ multi-source sign language samples (images, videos, landmarks).
- Trained and evaluated CNN and LSTM architectures, boosting model accuracy from 75% to 94% on a refined dataset.
- Designed and executed NLP preprocessing pipelines (cleaning, tokenization, semantic analysis) for real-time sentiment understanding

Research Intern Globus Eight, Gurugram | Jul 2024 – Aug 2024

- Researched ethical deepfake applications by reviewing 15+ frameworks and datasets, identifying 5 key gaps and proposing constructive AI use cases aligned with responsible AI principles.
- Developed deep learning–based lip-sync and audio–video synchronization models, achieving <80 ms audio–visual lag and generating high-fidelity AI-driven talking avatars validated through qualitative and quantitative evaluation.

Project Work

InterviewJinni | <u>GitHub</u> : Built an AI platform for adaptive mock interviews with real-time analytics and performance feedback.

GuruJi – Patent Filed | <u>GitHub</u> : Created a rapid MOOC development tool reducing course build time from days to minutes through automated content generation.

ShineMate – Design Patent: Developed a POC for an intelligent cleaning robot with autonomous navigation, obstacle detection, and air-quality monitoring.

FoliageAI | <u>GitHub</u> : Created an ML pipeline for automated tree species classification achieving 98% accuracy.

BCG Data Science Job Simulation | <u>Link</u> : Performed feature engineering and built a Random Forest model achieving 85% churn prediction accuracy.

Education

Shri Vishwakarma Skill University, Haryana	*Jul 2022 – Present*
Bachelors Of Technology in Computer Science and Engineering (AI & ML)	*CGPA: 8.5/10*

OOP, DSA, Databases, Machine Learning, Deep Learning, Data Analytics, Quantum Computing, Business Intelligence & Analytics

Certifications

- **Data Scientist Career Track —** *DataCamp*
- **Machine Learning Specialization —** *Coursera*
- **Neural Networks and Deep Learning —** *Coursera*
- **Improving Deep Neural Networks: Hyperparameter Tuning, Regularization and Optimization —** *Coursera*
- **Structuring Machine Learning Projects —** *Coursera*
- **SQL for Data Science —** *Coursera*
- **ML 101 (Scikit-learn & StatsModels) —** *Udemy*

Achievements

- Presented AI-driven projects ("GuruJi", "ShineMate", "InterviewJinni") to the Honourable Chief Minister of Haryana (2025).
- Advised on Haryana State Budget 2025–26, contributing insights on technology-led governance.
- Showcased "GuruJi" to the Honourable Governor of Haryana (2024).
- Discussed patents and outcomes of "GuruJi" and "ShineMate" with the Minister of State for Youth Empowerment (2024).
- Founded and led GDG on Campus (GDGoC) SVSU Chapter (2025–26), organizing workshops and hackathons to promote AI and Google technologies.
- Directed AI initiatives at Omdena, optimizing farms in Kenya and deploying pothole detection in Kolkata.