

Kunal Soni
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PROFILE

Kunal is a seasoned software and analytics professional with 12+ years of experience in data science, software development, and product development across multinationals and startups. He blends technical expertise with business acumen to deliver scalable, high-performance, and data-driven solutions. Known for intellectual curiosity, collaborative teamwork, and a strong work ethic, he has created lasting impact in e-commerce, energy, home appliances, health tech, and edtech domains. He is seeking a stable role in the ICT sector such as a Senior Software Engineer, Senior AI Engineer, Technical Lead, Engineering Manager, or Machine Learning Engineer.

EDUCATION

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| 2025-2026 | National University of Singapore Singapore | M.Comp. Major: Information Systems <i>Key Courses: Natural Language Processing, Big Data Systems for Data Science, Strategising for Global IT Enabled Business Success</i> |
| | | B.Tech. & M.Tech. Major: Naval Architecture and Ocean Engineering, Minor: Operations Research <i>Key Courses: Computational Engineering, Probability and Random Processes, Statistics, Fundamentals of Operations Research, Advanced Operations Research, Computer Simulation</i> |
| 2004-2009 | Indian Institute of Technology Madras Chennai, Tamil Nadu, India | |

SOFTWARE ENGINEERING SKILLS

- Programming Languages: TypeScript, JavaScript, Python, Java
- Backend Frameworks: Nestjs, Expressjs, Django Rest Framework
- Frontend Frameworks: ReactJs, NextJs, HTML, XML, and Tailwind CSS
- Databases: SQL, MongoDB, Redis (cache)
- High Performance Computing: CUDA, MPI, and OpenMP
- Cloud: AWS (ETL, RS, S3, EC2, Redis, DynamoDB, ElasticSearch), Microsoft Azure (VMs, Storage)
- Miscellaneous: Postman, RabbitMQ, Nginx/Apache, Docker, MS Office (Excel Macros), Grafana K6
- Operating Systems: Linux and DOS OS

DATA SCIENCE SKILLS

- Analytical Methods: Stochastic Modelling, Bayesian networks, Operations Research, Classification and Regression modelling, Unsupervised learning, Ensemble methods, SVM, Neural Network, Deep Learning, Natural Language Processing, and Generative AI
- Databases: VectorDBs (Pincone, Weavite)
- Software: Mathematica, MATLAB, R, and Octave
- Analytics Frameworks: Google TensorFlow, PyTorch, Google OR Tools, Llamaindex, Langchain
- Miscellaneous: Microsoft Power Point, Microsoft Word

WORK EXPERIENCE

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|-----------------------|---|------------------------|
| Dec23 to Dec24 | Liquid e-Learning Services Pvt. Ltd. <i>Director, Emerging Technologies</i> | NOIDA, India |
| | <ul style="list-style-type: none">➤ Developed RAG based chatbot to help train nurses for the Occupational English Test by allowing them to compare their responses to questions with AI responses➤ Formulated and coded a Linear Programming based vocabulary trainer for English language training in-house digital product➤ Developed backend and frontend for a children's quiz website for Government of India's MyGov.in digital engagement initiative | |
| Nov22 to May23 | Insurance Dekho <i>Technical Lead, Data Analytics</i> | Gurugram, India |
| | <ul style="list-style-type: none">➤ Developed a RAG based chatbot for health insurance line of business to answer customer queries on the company's website➤ Developed backend for health and motor insurance renewals | |
| Aug21 to Mar22 | Pristyn Care <i>Associate Director, Data and Engineering</i> | Gurugram, India |
| | <ul style="list-style-type: none">➤ Developed a route optimized scheduler for planning doctors' surgeries, eliminating the need for | |

- manual scheduling
- Developed an automated Google Ads reporting tool

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| Nov20 to Jun21 | Shopperr.in <i>Associate Director, Data Technology</i> | Gurugram, India |
| | <ul style="list-style-type: none"> ➤ Formulated the vision document to implement analytics for the e-commerce firm ➤ Developed a web scraper that scraped websites like Alibaba, Amazon, and Flipkart to select best rated products. | |
| Sep19 to Sep20 | Opplan.ai <i>Founder</i> | Delhi, India |
| | <ul style="list-style-type: none"> ➤ Built an image filtration tool for Creatologue Internet Pvt. Ltd. to automate image selection ➤ Built a chat web application for online dating for Profoundly.com | |
| Jul16 to Jun18 | Amazon India Development Center <i>Forecaster (Applied Scientist-2/Software Development Engineer-2)</i> | Hyderabad, India |
| | <ul style="list-style-type: none"> ➤ Developed the worldwide device and digital contacts forecasting system, streamlining (25x speed-up, 40 man-hours/week savings), standardizing (one method for all planning horizons, 15+ countries), and scaling (~6000 devices per country, add any number of new countries) the forecasting process | |
| Jan16 to Jul16 | Tatras Data <i>Data Scientist</i> | New Delhi, India |
| | <ul style="list-style-type: none"> ➤ Developed an apparel recommender system for UK's online fashion retail chain Dressipi | |
| Aug12 to Mar15 | General Electric Company <i>Scientist, Software Science and Analytics</i> | Bangalore, India & Louisville, USA |
| | <ul style="list-style-type: none"> ➤ Developed a predictive analytics model to plan down time of and prevent critical damage to gas turbines, saving \$5 MM annually for GE's clients ➤ Designed a refrigerator compressor prototype that achieved higher energy-efficiency than LG, Samsung, and Embraco compressors and more than 20 years of statistical reliability ➤ Developed a statistical portfolio risk calculator for GE Capital ➤ Developed a software to simulate metal alloy solidification, achieving 7x speed up w.r.t status quo and receiving \$60,000 funding from GE Aviation | |
| Dec11 to Jul12 | TATA Computational Research Laboratories <i>Engineer</i> | Pune, India |
| | <ul style="list-style-type: none"> ➤ Developed a software on EKA supercomputer to design ground vehicles for TATA Motors | |
| Aug09 to Aug11 | University of Wyoming & The Office of Naval Research <i>Research Associate</i> | Laramie, USA |
| | <ul style="list-style-type: none"> ➤ Developed flow physics software on HPC platform for US Army's rotor-craft research | |

AWARDS AND HONORS

- **ATMS Technology Project of the Year 2013 Award** – Awarded by GE's CTO for developing a refrigerator compressor prototype with **higher energy efficiency than Samsung, LG, and Embraco compressors** and over **20 years of reliability**. Projected to save **\$70M annually** for GE Appliances and to reduce electricity costs for millions of North American households. (1st among 25 projects/teams)
- **GE Lead Expo 2013 Award** – Led a 17-member engineering team to present on GE India's technology function and proposed strategy to improve its bottom line; the presentation was adjudged the best among 11 teams by a panel of GE India executives. (1st among 11 presentations/teams)

CERTIFICATES

- Statistical Learning by Stanford Lagunita, GE's ACE in Analytics and Software, Lean Six Sigma Green Belt, GE's Analytics Engineer, Problem Solving (Hacker Rank Gold Badge), Python (Hacker Rank Gold Badge), Generative AI – Pinnacle Course by Analytics Vidhya, Coursera's Machine Learning, Coursera's Probabilistic Graphical Models 1: Representation, Coursera's Generative AI with Large Language Models
- Software (on Udemy): The Complete Node.js Developer Course, NestJs The Complete Developers Guide, React – The Complete Guide, Python Django – The Practical Guide, Build Rest APIs with Django Rest Framework and Python, Docker for the Absolute Beginner – Hands on DevOps, Software Architecture and Design of Modern Large Scale Systems, React & Typescript – The Practical Guide, CSS – The Complete Guide