Pankaj Suthar
Software Development Engineer

✉ psuthar27302@gmail.com
 Pankajjsuthar | ● Codeforces
in LinkedIn | </> LeetCode

EDUCATION

Degree	Institute/Board	CGPA/Percentage	Year
Bachelor of Technology	Electrical Engineering, IIT, Ropar	7.08	2020-2024
Senior Secondary	Central Board of Secondary Education	94.40%	2020
Secondary	Central Board of Secondary Education	93.20%	2018

WORK EXPERIENCE

- **NIMS Lab, Dalhousie University, Canada**   *May 2023 - July 2023*
  MITACS Summer Research Intern   Halifax, Nova Scotia, Canada
  – Worked on 2-month research internship with **Dr. Nur Zincir Heywood** and **Dr. Riyad Alshammari** at Dalhousie University, Canada, focusing on traffic analysis of **Instant Messaging Applications** (IMA).
  – Analysed application traffic using Wireshark, tcpdump, and Android Studio, resulting in improved knowledge of network performance using **Python and Javascript** scripts for automation of traffic analysis process.

- **Golden sparrow LLC, San Francisco, USA**   *Feb 2024 - Jan 2025*
  Software Engineer - Freelance   Remote
  – Built and deployed Enterprise Mobility Management (EMM) solution with dashboards, APIs, and automated workflows, supporting 200+ drivers. Link - **DSP-MDM**
  – Developed data processing pipelines for automating **Claim form (US govt.)**(PDF filling extraction),optimization by 80%.
  – Exposed REST APIs (Node.js, Express, Flask) for compliance checking and employee tracking.
  – **(Google Appscript, Javascript)** app for scheduling of drivers according to FMCSA DoT compliance rules by **US Govt**.
  – Improved system reliability with logging, monitoring dashboards, and automated scheduling.
  – Upgraded websites for **BlueJay Delivery**, **Magic Wheel** and **Golden Sparrow** using JavaScript, EmailJS, HTML, CSS.
  – Tech stack: Python, Node.js, Google App Scripts, MongoDB, Firebase, Docker, Linux CLI.

- **PalsAnalytix**   *Oct 2024 - March 2025*
  Freelance Software Developer / Full Stack Developer   Remote
  – Architected a learning platform (MERN) with Twilio OTP, JWT auth, Razorpay, and Redux; Designed data pipelines storage (MongoDB, SQL) and integrated AWS S3 cloud workflow
  – Optimized full-stack performance through advanced **database query optimization** and **caching implementation**, delivering 70% faster load times while building responsive **TailwindCSS** UI with **AWS S3** cloud storage and automated subscription workflows with real-time webhook processing

PROJECTS

- **SDE Freelance projects**
  Google Appscripts, JavaScript, ReactJs, NodeJs, Firebase, MongoDB
  – **Driver Scheduling App :** Developed an efficient driver scheduling application, ensuring compliance with FMCSA DOT regulations by the US Govn, using **NodeJs, JavaScript, Appscript, OOPs** leading **20%** increase in compliance management.
  – **Automated PDF Filling Solution:** Robust solution in **JavaScript, Nodejs, OOPs** to fill & download PDFs using data from Google Sheets. Automated the completion of a complex US Government form for the Employer's Report of Occupational Injury or Illness, filling **30+** fields per form and facilitating efficient data management,decreased **80%** manual intervention.
  – **DSP-EMM Enterprise Solution :** Architected full-stack React.js dashboard with Node.js backend, TailwindCSS, Firebase Authentication, and Firestore NoSQL database for Android Enterprise Mobile Management (EMM), achieving 30% faster device onboarding through automated token generation and streamlined workflows deployed on cloud platforms.

- **AI Projects | Streamlit, Multi-Agent AI Frameworks (Crewai, Langraph), Cloud Deployment**
  CrewAi, Bedrock-agents, knowledge-based multi AI agents, kinesis, Streamlit, LangChain   ✪ **GitHub**
  – Built and deployed multi-agent AI system for autonomous collaboration and knowledge-based decision making. Integrated logging, inference APIs, and cloud deployment (AWS/Streamlit Cloud).

SKILLS

- **Programming & ML Frameworks**: Python, C/C++, NumPy, Pandas, scikit-learn, PyTorch (basic), TensorFlow (basic), SQL, MongoDB, React.js, Node.js, Express.js, FastAPI, Flask
- **Data & Deployment**: Data pipelines, Feature engineering, API development, JSON schemas, Error handling, AWS (EC2, S3), Docker, CI/CD, Streamlit, Reproducibility practices
- **Tools & Systems**: Git, GitHub, Linux CLI, MySQL, PostgreSQL, Firebase (NoSQL), Logging & monitoring, Dashboards
- **Soft Skills**: Agile practices, Documentation, Code reviews, Communication, High ownership and accountability

ACHIEVEMENTS/CERTIFICATES

- **NTSE Scholar**, Ranked among top 90 students in Stage 1 in Haryana and top 1000 students in Stage 2 in India.   *2018*
- **JEE Mains & Advanced**, 99.63 percentile in JEE Mains, top 6% among 160K students in JEE Advanced.   *2020*
- **Inter-IIT Weightlifting -**, Represented IIT Ropar in Inter-IIT 2022 held at IIT Roorkee in weightlifting event.   *2022*