

# SARTHAK PUNJ

AI/ML Developer | Backend  
Engineer | Data Scientist  
Computer Science Student • Data  
Science Specialist

**Email:** saaru1205@gmail.com

**Phone:** +91 9873862174

**Portfolio:** [Sarthakpunj](#)

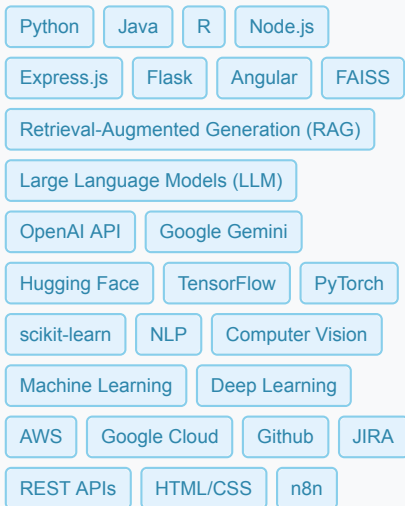
**Location:** Gurugram, Haryana, India

**LinkedIn:** [sarthak-punj](#)

## PROFESSIONAL SUMMARY

AI/ML Developer and Backend Engineer with hands-on experience in building large-scale machine learning systems, REST APIs, and cloud-integrated solutions. Published researcher with certifications from AWS and Google Cloud. Proven success in cross-functional teams and hackathons. Open to AI/ML or software engineering roles in the UK.

## TECHNICAL SKILLS



## EDUCATION

### MSc AI for Sustainable Development

University College London (UCL), UK  
Sep 2025 – Sep 2026 (Expected)

### B.Tech in Computer Science (Data Science Specialisation)

Vellore Institute of Technology, India (2:1  
UK equivalent)  
Aug 2021 – Aug 2025 | CGPA: 8.65/10

AI/ML Developer • Published Researcher • AWS & Google Cloud Certified • 3+  
Professional Internships

## PROFESSIONAL EXPERIENCE

### SOFTWARE DEVELOPER

#### Vouchagram India Pvt Ltd

Remote | Dec 2024 – June 2025

- Developed RESTful APIs using Node.js and Express.js for a voucher issuance and redemption platform.
- Enhanced server-side logic and request handling, improving overall application performance by 40%.
- Collaborated with cross-functional teams to ensure robust and seamless API integration.
- Strengthened backend development skills through practical exposure to scalable system design principles.

**Technologies:** Node.js, Express.js, PostgreSQL, Postman, RESTful APIs

### ARTIFICIAL INTELLIGENCE INTERN

#### BiUP.ai Technologies

Remote | May 2024 – Jul 2024

- Designed AI-powered solutions to enhance customer experience using speech technologies.
- Integrated Speech-to-Text (STT) and Text-to-Speech (TTS) systems to enable smooth user communication.
- Trained and fine-tuned Large Language Models (LLMs), achieving 95% accuracy in customer response handling.
- Conducted model optimisation workshops, increasing adoption rates of AI tools by 60%.

**Technologies:** Python, STT/TTS APIs, Large Language Models, NLP, Transformers

### SOFTWARE DEVELOPMENT INTERN

#### CSIR-National Physical Laboratory

New Delhi, India | Aug 2023 – Dec 2023

- Developed scientific software tools for precision in time and frequency metrology.
- Built responsive user interfaces using Angular for research-grade measurement applications.
- Increased precision and measurement reliability by 25% through algorithm and interface improvements.
- Collaborated with physicists and engineers to innovate metrology solutions.

**Technologies:** Python, R, MATLAB, Angular, HTML, CSS, JavaScript, PostgreSQL

### CONTENT DEVELOPMENT INTERN

#### Piphee Learning LLP

Remote | Aug 2022 – Feb 2023

- Produced interactive academic content for Physics curriculum under expert guidance.
- Recognised for accuracy, clarity, and commitment in educational material development.
- Assisted in instructional design for engaging e-learning modules.

**Skills:** Physics Content Creation, Academic Writing, Instructional Design

## KEY PROJECTS

### ADVANCED RAG SYSTEMS PIPELINE [GITHUB LINK](#)

March 2025 - Present

- Engineered advanced Retrieval-Augmented Generation (RAG) pipelines using AI APIs and vector databases.
- Integrated OpenAI, Google Gemini, FAISS, and Hugging Face to enable efficient document retrieval and context-aware generation.

**Tech:** Python, OpenAI API, Gemini API, FAISS, Hugging Face, NLP, Vector Databases

Maxfort School Dwarka, New Delhi, India

Higher Secondary Certificate (CBSE) – 2020 | Percentage: 92%  
Secondary School Certificate (CBSE) – 2018 | Percentage: 84%

CERTIFICATIONS

- AWS Certified Cloud Practitioner (Oct 2023)
- Google Cloud Digital Leader (Oct 2023)
- Microsoft Azure AI Solutions (Sep 2024)
- HackerRank Java Basic Certified
- HackerRank R Basic Certified
- HackerRank Problem Solving Basic
- HackerRank 3-Star Java Badge
- NPTEL Public Speaking (IIT Roorkee)
- NPTEL Wildlife Ecology (IIT Kanpur)
- Digital Design & UX (Forage)

LANGUAGES

- English (Professional Working Proficiency)
- Hindi (Native or Bilingual Proficiency)
- Spanish (Limited Working Proficiency)
- French (Elementary Proficiency)

CV ANALYZER TOOL [LIVE DEMO](#)

November 2024

- Developed a web application to extract and evaluate key resume insights using Natural Language Processing.
- Built for the Solidus AI Hackathon; recognised as a top 10 finalist out of 100+ teams.
- Parsed and analysed content from PDF and DOCX files to provide automated feedback.

Tech: Python, Flask, pdfplumber, python-docx, NLP, HTML, CSS, scikit-learn

MOVIE RECOMMENDATION SYSTEM [GITHUB LINK](#)

January 2025

- Created a personalised film recommendation engine using collaborative filtering and NLP techniques.
- Achieved 88% user satisfaction based on similarity-based recommendations and feedback analysis.

Tech: Python, Pandas, scikit-learn, NLP, Collaborative Filtering

FOOD LABEL READER [GITHUB LINK](#)

November 2024

- Designed an application to scan and interpret nutritional data from food labels using OCR and image processing.
- Enabled real-time extraction of key information to support dietary analysis.

Tech: Python, OCR Libraries, OpenCV, Image Processing

PUBLICATIONS & RESEARCH

Metaverse Miracles: Enhancing Healthcare Experiences Through Virtual Reality

International Journal of Learning and Change, Inderscience Publishers, 2024, Vol. 16, No. 4 (Published)

Revolutionizing Grading Systems: A GenAI Approach for Objective and Unbiased Evaluations

International Journal of Artificial Intelligence in Education, Springer Nature (Under Review)

ACHIEVEMENTS & RECOGNITION

- ★All India Rank 2000 in VITEEE (Top 1% of 200,000+ applicants) – 2021
- ★All India Rank 2069 in SRMJEEE (Top 1.4% of 150,000+ applicants) – 2021
- ★All India Rank 6750 in MET (Qualified for Manipal Institute of Technology) – 2021
- ★Published researcher in international peer-reviewed journals (Inderscience, Springer)
- ★Top 10 Finalist – Solidus AI Hackathon, HackerEarth – 2024
- ★Awarded Microsoft Certificate for “The Smart Shift: AI for a Better Tomorrow” – 2025
- ★Scored 100/100 in NPTEL Wildlife Ecology course, IIT Kanpur – 2024
- ★Served as Core Member of Ayuda NGO – Led education and healthcare initiatives for underserved communities

LEADERSHIP & COMMUNITY SERVICE

- Team Lead at the Solidus AI Hackathon (2024): Led a three-person team to develop a CV Analyzer Tool using Flask, HTML, and CSS.
- Core Member, Ayuda NGO (March 2022 - March 2023): Led education and healthcare initiatives for underserved communities
- Volunteer, Food Donation Camps (July - November 2023): Organized food drives impacting families
- Team Leader, Maha Behes Debate Competition (2017): Guided team strategy and cleared quarter-finals