

SIDDHARTH CHAUHAN

National Hackathon Finalist | Student at PEC and IIT Madras
+91-9501351769 | [Email](#) | [GitHub](#) | [LinkedIn](#) | [Portfolio](#) | Chandigarh

Education:

Punjab Engineering College

B. Tech in Electronics and Communications Engineering

IIT Madras

BS in Data Science (Foundation Level)

Bhavan Vidyalaya Chandigarh

10th and 12th

Nov 2022 – Jun 2026

Chandigarh, India

Sep 2023 – Sep 2026

Chandigarh, India

May 2015 – Jul 2022

Chandigarh, India

Key Experience:

Machine Learning Research under Professor at PEC (Ongoing)

(Project Link)

- Developed an ML algorithm with Python to process 10,000+ records, enhancing early Alzheimer detection
- Optimized models, improving accuracy by 10+% and workflow efficiency by 30% using Git
- Implemented scalable data pipelines with Docker and RESTful APIs on Google Cloud, speeding processing by 15%

Projects:

Dark Patterns Identifier 'PANDORA' (NLP)

(Project Link)

Machine Learning and Generative AI

- Led the team to **national finals**, to secure **12th place in India**, recognized by **IIT BHU** and **Ministry of Consumer Affairs**
- Scraped data from **4+ e-commerce sites** with **Beautiful Soup** and **Vicuna**, increasing **efficiency** in identifying dark patterns by **50+ %**
- Developed **4** custom datasets to analyse **20 models** and **100,000+ dark pattern instances** for thorough insights
- Designed the **Pattern Hunters extension**, **web scraper**, and **NLP model**, **boosting accuracy** in identifying dark patterns by **4%**

InfraMonitor

(Project Link)

AWS, Data Analytics and Docker

- Integrated **AWS**, **Docker** and **Kubernetes logs** in custom observability dashboard
- Developed backend service to **authenticate, process, and store log data**
- Visualized **real-time metrics, search and filter logs** for precise monitoring

Capital Asset Pricing Model (Portfolio Evaluation)

(Project Link)

Data Processing and Intelligent Analytics

- Applied CAPM to **2,000+ rows** using **Pandas**, estimating **stock returns, betas, market returns** and **portfolio risk**
- Incorporated **Value at Risk (VaR)** and the **Sharpe ratio** to evaluate portfolio risk and potential loss with **95% confidence level**
- Visualized results using **Matplotlib and Seaborn**, including betas, expected returns, **VaR**, and **Sharpe ratios** for **7 global stocks**

Skills:

- Programming Languages:** C++, Python
- Web Development:** MongoDB, Express, React, NodeJS
- Analytics:** SQL (*HackerRank 5 Star*), NumPy, Pandas, Matplotlib and Seaborn
- Machine Learning and GenAI:** TensorFlow, WebScraping, LLM and NLP, Model Training/Validation, Model Selection and Optimisation, Predictive Analysis, Reinforcement and Deep Learning, Prompt Engineering, Vicuna based AI models
- Tools and Other Skills:** MySQL, Jupyter, MS Excel, MS PowerPoint and Project Management
- Cloud:** AWS Cloud (Basic Proficiency), AWS Elastic Umbrella (Basic Proficiency)

Position of Responsibility and Extra Curriculars:

Executive Board Member, Speakers' Association and Study Circle

Mar 2023 – Present

- Successfully mentored **150+ students** and led a team of **20+ EB members** to organize of **Trivium 2023, Verve 2023, Verve 2024** and **PECMUN 2023**

Finance Sub-Head, PECFEST 2023 Organising Committee

Sep 2023 - Nov 2023

- Managed bank and retailer transactions worth **INR 25,00,000/- net** and led the team with a budget of **INR 2,00,000/-**

Others

- Representative** for **Foreign Delegate G22 Submit** held at PEC by Central Govt. of India amongst **4000+ candidates**
- Class Representative:** Representative of ECE in Student Official Committee
- Core Member of Robotics and IEEE:** Pioneer in the revamping and subsequent coordination of the technical societies

Achievements:

- Awarded **first prize** at two college-level hackathons and achieved **National Finalist** status in **DPBH Hackathon (Govt. Of India)**
- National Finalist** at **TVS Credit E.P.I.C 6.0** for innovation in existing status quo (Results Awaited)
- National Qualification** in **AmEx EDA** and **IIT Madras Trylitics Competition**
- First Runner - Up** at **E-Summit Boardroom Walmart Case Analytics Competition**
- Qualified** for **Shanghai International** zonal in BPD debate and awarded **Best Speaker** for 2023-2024 at PEC
- Government of India** representative for the **G22 Summit** and **First Runner-Up** at **Viksit Bharat 2024 Panel Discussion**