

SABARNA SARKAR AI/ML Engineer

Passionate tech consultant with 2+ years of experience. Proficient in various programming languages and frameworks, delivering high-quality software solutions. Adaptable and innovative, thriving in collaborative environments.

 \checkmark

rssarkar 26@gmail.com



Kolkata, India



github.com/Sabarna-dotcom



7890699646

linkedin.com/in/sabarna-sarkar

♣ Work Experience

Assistant System Engineer, TCS

Feb 2021 - July 2023, Bangalore, India

- Worked within Scrum teams to foster efficient development cycles.
- Collaborated with clients to analyze requirements, create test cases, and ensure quality assurance.
- Specialized as a React.js Developer, building dynamic UI components.

Education

M.Tech, Computer Science & Engineering

National Institute of Technology (NIT) Jamshedpur, 2023-25 (CGPA: 8.41 UP to 3rd Sem)

B.Tech, Electronics & Communication Engineering Academy of Technology (MAKAUT), 2016-20 (CGPA: 8.06)

Higher Secondary (10+2), PCM WBCHSE, 2014 - 2016 (82.20%)

Secondary Education (10th) WBBSE, 2008 - 2014 (86.86%)

C Technical Skills

- C++, Python, Data Structures, DBMS
- EDA, SQL, Power BI
- Machine Learning, Flask, MLOps
- React.js, Node.js, Express.js, NoSQL/MongoDB
- Git/GitHub, Docker, AWS

Q Certifications & Achievements

- 2nd Best Paper Award "A Hybrid Fuzzy AHP-VIKOR Framework for Systematic Evaluation and Ranking of Metaverse Applications", presented at SCMIM-2025.
- Paper Presentation "A Systematic Literature Review on the Privacy and Security of Cloud-Integrated AI-Enabled Internet of Medical Things (IoMT)", presented at SCMIM-2025.
- Best Team Award TCS DCP New Sales.
- TCS Wings1 Certified React.js.
- GATE CSE 2023 96 Percentile.

- English Full Professional Proficiency
- Bengali Native or Bilingual Proficiency
- Hindi Limited Working Proficiency

T Projects

Student Performance Predictor (Dec 2024 - Jan 2025)

- Developed an ML model to predict student performance.
- Conducted data pre-processing, feature selection, and evaluation.
- Tools: Python, Scikit-learn, Pandas, NumPy, Flask, Docker, AWS EC2.

Fire Weather Index Predictor (July 2024 - Aug 2024)

- Predicted fire weather index (FWI) using ridge regression.
- Conducted data pre-processing, feature selection, and evaluation.
- Tools: Python, Scikit-learn, Pandas, NumPy, Flask, AWS Beanstalk, AWS CodePipeline.

▲ Research Work

- AHP-VIKOR for Metaverse Application Ranking Ranked metaverse domains using hybrid MCDM; Healthcare emerged as the top application. (2nd Best Paper SCMIM-2025)
- SLR on Security of AI-Enabled IoMT As Healthcare ranked top, this review focused on AI-integrated healthcare systems (IoMT), identifying key security threats and research gaps. (Presented at SCMIM-2025)
- Fuzzy AHP-COPRAS for MCPS Vulnerability Ranking Based on the IoMT review, this work ranked vulnerabilities in MCPS System.
- ML-Based IDS for Hypervisor MitM Detection A PCA + Isolation Forest + KNN-based IDS was developed for detecting MitM attacks.
- DL-Based IDS for Cloud MCPS Hypervisor Security

 To enhance detection accuracy, a CNN-BiLSTM-Transformer model with SMOTE was proposed for hypervisor-level MitM detection in cloud-integrated MCPS.