# SANDARBH YADAV

✉ apexpacesandy@gmail.com    ✉ 22d0374@iitb.ac.in    ☎ +91 9628994010
🔗 https://sandarbhyadav.github.io/    ⌨ https://github.com/SandarbhYadav
in www.linkedin.com/in/sandarbh-y-946775115    🔗 https://orcid.org/0009-0001-5472-3015

## EDUCATION

### Indian Institute of Technology, Bombay
**Ph.D. in Computer Science and Engineering**

📅 Jul 2022 – Present          🎓 CGPA = 9.09

Advisor: Prof. Shivaram Kalyanakrishnan (IIT Bombay)
Co-advisor: Prof. Vadlamani Ravi (IDRBT, Hyderabad)

### Atal Bihari Vajpayee - Indian Institute of Information Technology and Management, Gwalior
**B.Tech. in Computer Science and Engineering**

📅 Jul 2017 – Jun 2021          🎓 CGPA = 9.44

### Army Public School, Jhansi
**Class XII, CBSE**

📅 Apr 2015 – Mar 2016          🎓 Percentage = 94.60%

**Class X, CBSE**

📅 Apr 2013 – Mar 2014          🎓 CGPA = 10.00

## EXPERIENCES

### Oracle
**Software Developer**

📅 Jul 2021 – Jul 2022          📍 Bengaluru, India

5G NEF Project

### Directi
**Intern**

📅 May 2018          📍 Gwalior, India

Taught competitive programming to school students on CodeChef using Python

## SKILLS

- **Languages:** C, C++, Java, Python, SQL etc.
- **Libraries:** NumPy, Pandas, Matplotlib, Seaborn, Scikit-learn, Keras, OpenAI Gym, etc.
- **Frameworks:** PyTorch, TensorFlow, JUnit, Spring, etc.
- **Tools:** Git, Gradle, Maven, Docker, Kubernetes, Arduino, LaTeX, MATLAB, Confluence, Jira, etc.
- **Technologies:** Microservices, REST API, Java Persistence API, OOP, Cloud Computing, etc.
- **Others:** Research, Teaching, Agile Methodology, etc.

## PUBLICATIONS

S. Yadav and P. K. Singh, "Relegation-based league championship algorithm," in *2021 8th International Conference on Soft Computing & Machine Intelligence (ISCMI)*, pp. 80–85, IEEE, 2021.

**Accepted:**
"Deep Reinforcement Learning for Financial Forecasting" - Journal of Information and Knowledge Management (JIKM)

**Under review:**
"Hybrids of Reinforcement Learning and Evolutionary Computation in Finance: A Survey" - ACM Computing Surveys (CSUR)

## PROJECTS

### Causal Discovery using Reinforcement Learning

📅 Jan 2023 – Apr 2023    📖 Adv. ML Course Project

Used actor-critic framework
Supervisor: Prof. Sunita Sarawagi, IITB

### Bayesian Coreset Optimization for Personalized Federated Learning

📅 Jan 2023 – Apr 2023    📖 Opt. in ML Course Project

Proposed modifications to existing algorithms
Supervisor: Prof. Ganesh Ramakrishnan, IITB

### Solving the Cold Start problem in Recommendation Systems

📅 Aug 2022 – Nov 2022    📖 ML Course Project

Used graph convolutional neural network (GCNN)
Supervisor: Prof. Preethi Jyothi, IITB

Apart from these, I have done some other projects in RL, ML, NLP, IoT, Software Engineering, etc.

## RESEARCH AREAS

- **Artificial Intelligence:** Reinforcement Learning, Deep Learning, Machine Learning, etc.
- **Evolutionary Computation:** Genetic Algorithms, Swarm Intelligence, Evolutionary Strategies, etc.
- **Banking and Finance:** Trading, Portfolio Optimization, Systemic Risk, etc.