# AMANDEEP

+91 8595155610 amandeep_se21a13_49@dtu.ac.in LinkedIn | GitHub

## EDUCATION

| | | | |
|---|---|---|---|
| B.TECH (Software Engineering) | 2021-2025 | Delhi Technological University, New Delhi | 7.05 CGPA |
| CBSE (Class XII) | 2019 | Army Public School Dhaula Kuan | 90 % |
| CBSE (Class X) | 2017 | Army Public School Dhaula Kuan | 83.6 % |

## INTERNSHIPS / WORK EXPERIENCE

***SOFTWARE ENGINEER – AI/ML INTERN***, CloudFeather Games | LOR *May 2024 - July 2024*

- **Designed and implemented** a comprehensive **predictive analytics model** for accurately **forecasting player retention** and **churn rates** in **"Cash or Crash"** online game with an impressive **85% accuracy**, providing valuable insights that enhanced **data-driven strategic decision-making** for **user engagement strategies**.
- **Developed and deployed a machine learning model** using **XGBoost** to **predict** potential **game server downtimes** and **latency issues** based on **real-time data**, achieving **89% accuracy**, thereby improving **system reliability**.
- **Analyzed customer feedback** and **market trends** while collaborating with **cross-functional teams** in an **agile environment** to **redesign 6 UI elements** within "Cash or Crash", including the game lobby, player profiles, and in-game HUD components, resulting in significant **improvements in key metrics** such as **gaming experience** & **usability**, which led to **increased player engagement**.

## PROJECTS

***SCRIBEFLOW:*** | GitHub | (HTML | CSS | JS | REACT)

- **Developed a real-time transcription and translation** web application **utilizing OpenAI's Whisper model** for precise transcription with an **accuracy rate of 95%**, and **Xenova transformers for multilingual translation**, supporting **over 200 languages** and **dialects**.
- **Integrated cutting-edge machine learning models** with Vite, **enabling efficient real-time audio processing** and **translation** with an average **processing latency of less than 500ms**, significantly **enhancing accessibility** and **user experience**.
- **Optimized application performance** for real-time interaction by **implementing Web Workers, achieving a 40% reduction in processing time** during parallel transcription and translation tasks, **ensuring smooth** and **responsive user interactions**.

***MAMMOGUARD:*** | GitHub | (Pandas | NumPy | Matplotlib | Scikit-learn | Seaborn)

- Used **statistical and machine learning techniques** to develop a **machine learning model** to predict breast cancer diagnoses using dataset with **571 entries**, focused on identifying malignant and benign tumors.
- Successfully **improved model accuracy** through feature selection and hyperparameter tuning. Evaluated the model accuracy of the **k-NN classifier**, achieving **94% accuracy**. **Generated report & pitch** deck.

***WEATHER FORECASTING MODEL:*** | GitHub | (Pandas | NumPy | Matplotlib | Scikit-learn | Seaborn)

- **Analyzed extensive datasets**, performing **quantitative analysis** with **data visualization and analysis tools**. Reported **deep insights and key trends** of weather attributes, including correlation-based feature evaluation, information gain.
- **Implemented & evaluated** various **machine learning algorithms (e.g., LR, Decision Tree, Random Forest, ANN, KNN)**. **Benchmarked performances** with Root Mean Square Error, **achieving 81% accuracy** with **Random Forest Regressor**.

***PLINKO CLONE:*** | GitHub | ( Python )

- **Conceptualized and coded** one the most popular **crypto gambling games** known for its unpredictability and excitement which can further **support real-time betting, cryptocurrency transactions and dynamic odds**.

## ACADEMIC ACHIEVEMENTS AND AWARDS

- ***INFOSYS:*** **Certification of Merit** from **Infosys** in **Data Science, Artificial Intelligence, Deep learning, Natural Language Processing, Agile & Scrum, Computer Vision, Generative Models, OpenAI GPT models, Robotic Process Automation.**
- ***AMAZON WEB SERVICES:*** Secured **199th India Rank, 611th World Rank** in **Amazon Web Services DeepRacer'24** to develop **reinforcement learning model** based on PPO algorithm, utilizing and optimizing various hyperparameters.
- ***UNIVERSITY OF PENNSYLVANIA:*** Certification in **Corporate Finance & Financial Accounting.**
- ***MINISTRY OF EDUCATION OF CZECH REPUBLIC:*** Secured **23rd Global Rank** in 15th year of Fyziklani 2021 organized on behalf of Department of Applied Mathematics and Theoretical Physics, Charles University | links

## TECHNICAL SKILLS

- ***PROGRAMMING LANGUAGES/TECH STACK:*** C, C++, HTML5, CSS3, SQL, EJS, JavaScript, Python.
- ***TECHNOLOGIES:*** React.js, Node.js, Tailwind CSS, VSCode, GitHub, Git, Canva, Google Colaboratory, StarUML, LaTeX.
- ***PROFICENT IN:*** Data Structures & Algorithms, Machine Learning, Data Analytics, Data Science, Artificial Intelligence, Deep Learning, Software Testing, Software Project Management, Distributed Systems, OS, DBMS, Object Oriented Design, Natural Language Processing, Agile Scrum, OpenAI GPT Models, Generative Models

## POSITIONS OF RESPONSIBILITY

***PUBLIC RELATIONS & PUBLICITY HEAD, EMCEE DTU*** – The Anchoring and Hosting society of DTU

- Steered Helped in ensuring smooth hosting several College events including *DynaMIC*' 24, EngiFest'23, Yuvaan'23, Invictus'23