

# EMIL JINU

Computer Science Undergraduate (AI & Machine Learning)

Bangalore, India | LinkedIn: [linkedin.com/in/emiljinu](https://www.linkedin.com/in/emiljinu) | GitHub: [github.com/emiljinx-core](https://github.com/emiljinx-core)

## EDUCATION

### Jain (Deemed-to-be) University, Bangalore, India

Graduation - 2028

Bachelor of Technology in Computer Science and Engineering

Specialization: Artificial Intelligence & Machine Learning

SGPA: Sem I - 9.8 | Sem II - 9.6 | Sem III - 9.7

### Relevant Coursework:

Artificial Intelligence, Machine Learning, Data Structures and Algorithms, Python Programming, Object-Oriented Programming, Database Management Systems, Operating Systems, Computer Networks, Linear Algebra, Probability and Statistics

## TECHNICAL SKILLS

**Programming Languages:** Python, Java, JavaScript, SQL

**ML/DL Frameworks:** PyTorch, Scikit-learn, Transformers

**Data Science Libraries:** NumPy, Pandas, Matplotlib, Seaborn, Jupyter Notebook

**Web Development:** Streamlit, HTML, CSS, JavaScript, REST APIs, Next.js, Tailwind CSS

**Cloud & DevOps:** Google Cloud Platform, Vertex AI, Cloud Run, API Gateway, Git, GitHub

**Databases:** PostgreSQL, MongoDB, MySQL (conceptual / project-level exposure)

**Development Tools:** VS Code, PyCharm, Google Colab, Postman

## PROJECTS

### Sysmon Sentinel - Explainable Malware Detection Using Transformers

**Tech Stack:** Python, PyTorch, Scikit-learn, Transformers, Next.js, Tailwind CSS

Live Demo: <https://lnkd.in/exNXu629> | Repository: <https://lnkd.in/ezT-rp6M>

Nov 2025

- Built a transformer-based malware detection system for Windows Sysmon logs using ensemble learning.
- Integrated explainable AI to generate human-readable security reasoning via LLM-based analysis.

### Movie Recommendation System Using NLP

**Tech Stack:** Python, Scikit-learn, NLP (TF-IDF, Cosine Similarity), Streamlit

Live Demo: <https://lnkd.in/eiTU9Tke> | Repository: <https://lnkd.in/e2b2WR26>

Feb 2025

- Developed a content-based movie recommender using NLP on metadata and similarity scoring.
- Deployed an interactive Streamlit app integrating TMDb API for real-time recommendations.

### Protein Structure Prediction & Visualization Web Application

**Tech Stack:** Python, Streamlit, AlphaFold2 (BioColabFold), Py3Dmol

Live App: <https://lnkd.in/etVK9hEY> | Repository: <https://lnkd.in/e8Pfcux8>

May 2025

- Built an AI-powered web app to predict and visualize 3D protein structures from amino acid sequences.
- Enabled interactive molecular visualization with customizable views and example proteins.

### Water Potability Prediction Using Machine Learning

**Tech Stack:** Python, Pandas, NumPy, Scikit-learn

Repository: <https://lnkd.in/eaajin5r>

Feb 2025

- Trained multiple classifiers to predict water potability, achieving **92.5% accuracy** with Random Forest.
- Applied EDA, preprocessing, and feature engineering on real-world water quality data.

## CERTIFICATIONS

- Neural Networks and Deep Learning** - DeepLearning.AI
- Mobile Virtual Reality and Artificial Intelligence** - NPTEL (IIT Mandi)
- Generative AI Study Jams Campaign (2024-2025)** - Google Developer Groups On Campus

## EXPERIENCE

### Outreach Team Member - The Turing Club

Sept 2024 - Present

- Selected for the outreach team; collaborated on networking, partnerships, and community engagement initiatives.
- Supported technical events, workshops, and coordination with peers and industry professionals.