Roshan Mohapatra

razzrosan78@gmail.com | 8457950292 | Bhubaneswar, Odisha

Professional Summary

Highly motivated and skilled B.Tech (CSE - AIML) student with a strong foundation in AI/ML and software development. Experienced in building innovative tech solutions and deploying real-world projects. Seeking to leverage technical expertise in Python, FastAPI, and data science tools to contribute to creative and technical aspects of music composition, orchestration, and audio production. Eager to apply problem-solving skills and adaptability to the dynamic field of music technology.

Skills

- Programming: Python, Java (Core)
- Music Technology: MIDI Sequencing, Audio Processing, Digital Audio Workstations (DAWs)
- AI/ML for Music: Algorithmic Composition, Music Generation Models
- Web Development: FastAPI, React.js, HTML5, CSS3, Tailwind CSS
- Audio Tools: Ableton Live, Logic Pro, FL Studio (basic)
- Cloud & DevOps: AWS (EC2, S3, Lambda), Supabase, Git, GitHub
- Libraries & Tools: NumPy, Pandas, Scikit-learn, Jupyter Notebook, Pydantic

Projects

Music Generation API

Built a Python-based API using FastAPI to generate algorithmic music based on user inputs.

- Utilized machine learning models for pattern recognition and composition.
- Integrated MIDI sequencing libraries for audio output.

Interactive Music Player

Developed a full-stack web application for interactive music playback and management.

- Designed REST APIs with FastAPI for seamless user interaction.
- Implemented audio file handling and playback controls.

Algorithmic Composition Tool

Created a tool using Python and ML libraries to generate music based on predefined patterns.

- Trained models on existing music datasets for style replication.
- Provided a user interface for customization and playback.

Experience

ML Research Intern

BADAL Institute of Life Sciences (ILS) | Bhubaneswar, Odisha Dec 2024 – Feb 2025

- Developed ML models for data-driven applications, including music generation.
- Collaborated on backend development using FastAPI and Supabase.

Backend Developer Intern

NextTech | Bhubaneswar, Odisha Feb 2025 – Present

- Designed and implemented REST APIs for music-related applications.
- Integrated authentication and access control for user management.

Education

GITA Autonomous College

B.Tech in Computer Science and Engineering (AI & Machine Learning) 2022 – Present

- Secured an average of 85% in 3 years.

Kendrapara Public School

12th | 2020 - 2022

- Secured 85%.

Kendrapara Public School

10th | 2020

- Secured 83%.

Certifications

- Machine Learning Andrew Ng, Coursera
- REST API Development, FreeCodeCamp
- Al for Everyone, Coursera

Additional Information

- Strong interest in the intersection of technology and music.
- Proficient in adapting technical skills to creative domains.
- Available for interviews and open to collaborative projects in music technology.

Note: Ensure the file name is in a standard format (e.g., Roshan_Mohapatra_Resume.pdf) for ATS compatibility. ```