

Classical Piano Composer

**Prof. Rupa V Lichode¹, Rizwan Khan², Arpita Chandu Satpute³, Shraavi Mahendra Ramteke⁴,
Suraiya Sherkhan Pathan⁵, Prajwal Loncharan Patil⁶**

Guide, Department of Computer Science and Engineering¹

Students, Department of Computer Science and Engineering^{2,3,4,5,6}

Rajiv Gandhi College of Engineering Research and Technology, Chandrapur, Maharashtra, India

rupalichode@rcert.ac.in, rizwaankhan10145@gmail.com, arpitasatpute2003@gmail.com

shraaviramteke2003@gmail.com, suraiyapathan1405@gmail.com, prajwalpatil2812@gmail.com

Abstract: *This study introduces a system for creating classical piano composer using a neural network with Python. The main aim is to investigate how deep learning, and in particular, Long Short-Term Memory (LSTM) networks, can be used to model and mimic patterns in classical music. The work is split into two modules: the first preprocesses MIDI files to identify musical features, and the second trains an LSTM model to create new pieces. Experimental findings demonstrate that the model effectively extracts harmonic and rhythmic patterns, generating coherent and style-consistent music sequences. The research contributes to the expanding field of AI-composed music and provides a foundation for future creative computing research.*

Keywords: Classical Music Generation, LSTM Neural Network, Music Composition, Deep Learning, Sequence Modeling, MIDI Data Processing, Recurrent Neural Networks (RNN)

