

# Pooja Gayathri Kanala

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## Education

**National Institute Of Technology Suratkal**

Karnataka, India

*Bachelors of Technology - Computer Science and Engineering*

*Dec 2020 – Present*

## Technical Skills

**Languages:** C++, Python, C, PHP, HTML, CSS, JavaScript, Ruby, SQL, JAVA

**Frameworks:** React.js, Flask, Ruby on Rails, Node.js, MySQL, .NET, Postgresql, Django, Tensorflow, Flutter

**Tools:** Git, Docker, Nmap, Wireshark, Metasploit, Kali Linux

## Projects

**Bug Tracker** | *Bootstrap, Dockerfile, ASP NET, Javascript, Sqlite*

June 2022 – Present

- A web application that uses .NET core implemented Web API, which allows users to keep a track of the projects and the bugs/issues
- The app uses an Entity Framework Core to communicate with a Sqlite database
- User can create a bug and also can assign a bug to another user (or self), when viewing bug details along with managing the project.

**Audio Fingerprinting** | *Python, Numpy, MySQL*

Dec 2021 – March 2022

- Generated an ML model that can identify music based on a short sample played and using the microphone on the device.
- A digital fingerprint of the unknown sample is created using the hashing algorithm and is matched against a large set of fingerprints stored in the database with the use of a search algorithm.
- Implemented the Fast Fourier Transform (FFT) algorithm and also plotted a Spectrogram by obtaining Short-Term Fourier Transform of the unknown audio file.

**Connect-4 with AI** | *Python, pygame*

March 2021 – May 2021

- Recreated the bimatrix connect-4 game with a fully functioning AI to play against and also multiplayer mode using python and pygame.
- Analyzed recursive algorithms such as Minimax algorithm by generating game tree to create an AI and optimized to reduce the computation time and searching in the algorithm using alpha beta pruning and tabulation, which proceeds in a depth first fashion by passing 2 extra parameters in the Minimax function.
- For the implementation of GUI for the game we used surface, font, draw and display modules of pygame.

**Monopoly** | *C++, CMake, CSS, SFML*

May 2022 – June 2022

- A GUI-based game of monopoly made by using C++ and SFML.
- The game uses OOP implementation across the board to ensure its functionality. The primary focus was on building visual elements and interactivity in the game.
- Implemented concepts like Boolean matrices, linear transformations, Directed graphs, Relations.

## Volunteer Experience

• **Executive member-Institution of Engineering and Technology**

Oct 2021 – Present

*Conducted summer mentorship program and developed projects along with the mentors*

• **Executive member - Hack verse NITK**

Dec 2021 – Present

*Organized the online Hackathon Hack verse 3.0*

## Intrests

• Athletics • cyber security • Hackathons • User interface • Reading • Learning • Sales