# **Aakarsh Pathak**

Bengaluru, Karnataka | 8484912069 aakarsh204@gmail.com

## Experience

# DeepTek AI | Maharashtra, Pune

Machine Learning Intern | 05/2024 - 07/2024

- Worked on Kaggle's **Pneumonia** Dataset
- Created and tested custom CNN architectures and achieved AUROC of 0.91
- Achieved AUROC of **0.94** by fine-tuning **VGG16**
- Improved performance of model by using advanced learning methods like early stopping, learning rate scheduling and data augmentations.
- Used **GradCAMS** to improve model performance.
- Trained the model at **different resolutions** to allow it to extract features better and improve accuracy.

# Geminus Tech | Maharashtra, Pune DevOps Intern | 05/2023 - 07/2023

- Learnt how to use **Linux Terminal** and CLI on Ubuntu.
- Learnt basic bash scripting.
- Learnt how to use **docker** to create images of processes and deploy them.
- Grasped the basics of **Kubernetes**.

#### Skills

Communication Skills, Linux, Java, Machine Learning, PyTorch, Python, Javascript, React, C, English

#### Education

#### Manipal Institute of Technology | Bengaluru, Karnataka

BTech: Computer Science | 05/2026

### **Projects**

### 2D Game Portfolio

- Developed a portfolio in the form of a **2D RPG** for the web browser.
- Used **Kaboom.js**, a Javascript library to help make 2D games using pure code.
- Imported publicly sourced assets to create the map on **Tiled**

### Pneumonia Classification Model

- Built a CNN (Convolutional Neural Network) to extract features from chest X-Rays and classify whether the given X-Ray has pneumonia.
- Used GradCAMS to improve performance
- Employed advanced learning methods such as early stopping, checkpointing, learning rate scheduling and data augmentation.

#### Blackjack Game in Java

- Created a text based version of the popular casino game, Blackjack.
- Coded and implemented the logic from scratch using data structures and principles of OOPs.

#### GitHub Profile