

Program 1

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\documentclass[12pt,a4paper]{article}
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```
\usepackage[left=2cm,right=2cm,top=2cm,bottom=2cm]{geometry}
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```
\usepackage{fancyhdr}
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\fancypagestyle{plain}{
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    \fancyhead{}
```

```
    \fancyhead[R]{Latex Project}
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```
    \fancyfoot{}
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    \fancyfoot[C]{JNNCE, Shivamogga}
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    \fancyfoot[R]{\thepage}
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\begin{document}
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```
\title{Introduction}
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\maketitle
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\section{About JNNCE}
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The history of JNN College of Engineering is marked by events that have made it synonymous with quality education. Established in 1980 by NES, the College is affiliated to Visvesvaraya Technological University, Belagavi and is recognized by the All India Council for Technical Education (AICTE) and Government of Karnataka, being re-accredited by National Board of Accreditation (NBA) and accredited by Institution of Engineers (India). Set in a lush green environment of over fifty acres.

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\section{About Department of CSE}
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The Computer Science and Engineering department was established in the year 1991. Since then, the department has held a position of pride in JNNCE. The Department offers B.E., with an intake of 180 and PG course in M.Tech.(CSE) with an intake of 25. The department has well qualified, experienced and dedicated faculty to provide quality industry tuned education to the students.

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\subsection{Program Education Objectives}
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\begin{itemize}
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\item PEO1: Graduates will have a strong foundation in fundamentals to solve Engineering problems in different domains.
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\item PEO2: Graduates will have successful careers as computer Science Engineers and be able to lead and manage teams.
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\item PEO3: Graduates will instill interpersonal skills and attitudes in the process of Life long learning.

\end {itemize}

\subsection{Program Specific Outcomes}

\begin{itemize}

\item PSO1: Ability to adapt to a rapidly changing environment by learning and employing new programming skills and technologies.

\item PSO2: Ability to use diverse knowledge across the domains with inter personnel skills to deliver the industry need.

\end {itemize}

\end{document}

Program 2

\documentclass[10pt,a4paper]{article}

\usepackage[utf8]{inputenc}

\usepackage{amsmath}

\usepackage{amsfonts}

\usepackage{amssymb}

\usepackage[left=3cm,right=3cm,top=2cm,bottom=2cm]{geometry}

\begin{document}

\thispagestyle{plain}

\begin{center}

\Large

\textbf{COVID-19 and Comorbid} \\\

\vspace{0.4cm}

\large

AI in Medical Field \\\

\vspace{0.9cm}

\textbf{Abstract}

\end{center}

The advent of COVID-19 marks a significant turning point in medical history, leading to increased reliance on advanced technologies such as deep learning models. These models

have become indispensable for promptly identifying COVID-19 in medical images obtained through Computerized Tomography (CT), Ultrasound, and X-ray scans. This study aims to equip healthcare professionals with an additional tool to improve the formulation of effective treatment plans and containment strategies for the disease. A new hybrid architecture called MobNetCov19 has been introduced for diagnosing COVID-19 in patients with comorbidities, utilizing a Convolutional Neural Network (CNN) model. The research investigates optimized versions of VGG19, ResNetRS152, and MobNetCov19 (VRM) models, facilitating a comparative assessment of different imaging modalities. Despite the limited availability of COVID-19 datasets, sophisticated detection models have been carefully developed.

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Keywords: Convolutional Neural Network, Computerized Tomography, Coronavirus-19, MobNetCov19, VRM.

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\textbf{Summary}

The study reveals that CT scans excel in disease detection compared to X-ray and Ultrasound scans. Researchers tested three models—VGG19, ResNetRS152, and MobNetCov19—carefully adjusting parameters for accuracy. Augmentation techniques significantly improved the models' precision, particularly in early disease detection. Limited data availability posed a challenge for training more complex models. Results indicate that CT and Ultrasound datasets outperform X-ray data in disease detection. The MobNetCov19 model, fine-tuned rigorously, achieved impressive accuracy rates of 98% for CT, 98% for Ultrasound, and 96% for X-Ray data.

\end{document}

Program 3

\documentclass{report}

\usepackage{graphicx}

\usepackage{setspace}

\usepackage{geometry}

\newcommand{\titlepageVTU}{

\begin{titlepage}

```

\begin{center}

\textbf{\LARGE JNN College of Engineering, Shivamogga} \\

\begin{center}

\includegraphics[width=0.3\textwidth]{vtu.jpg} % VTU logo (replace with actual logo file)

\end{center}

\vspace*{1cm}

\textbf{\LARGE Visvesvaraya Technological University}

\vspace{0.5cm}\\

{\Large Department of Computer Science and Engineering}\\ % Replace with your department
name

\vspace{2cm}

{\huge\textbf{COVID-19}}\\ % Replace with your project title\\

\vspace{2cm}

\textbf{\Large by}\\

\vspace{0.5cm}

{\Large Kumar} % Replace with your name

\vfill

\textbf{\Large Mrs. Namitha M V} % Replace with your guide's name

\vspace{0.5cm}

{\Large Your Co-guide's Name (if any)} % Replace with your co-guide's name, if any

\vfill

{\large 8th Semester, 2024} % Replace with semester and year

\end{center}

\end{titlepage}

}

\begin{document}

\titlenameVTU % Insert custom title page

\end{document}

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