Khushi Agarwal

Btech Student – Computer Science, Vellore Institute of Technology

✉ khushi.agarwal2021.25@gmail.com   •   ⌂ GitHub   •   in LinkedIn

Education

Bachelor of Technology in Computer Science specialization in AI and Robotics
Vellore Institute of Technology, Chennai
CGPA: 8.72/10

• *Relevant Courses*: Data Structures and Algorithms, Machine Learning, Embedded Systems, Robotics Kinematics, Robot Operating Systems.

Experience

o   Research Intern supervised by Dr Karthik R
    Vellore Institute of Technology, Chennai

   • Implemented an end to end image classification model using convolutional neural networks for citrus disease detection.
   • Authored a research paper detailing methodologies and findings of the project.

o   Data Science Intern [Code]
    PMCGS Pvt ltd, Chennai

   • Collaborated in a team of 5 to analyze and model data collected during the curing and venting process.
   • Developed predictive models to forecast temperatures and pressures for subsequent cycles using provided datasets.

o   Financial Analyst
    Finlatics
   • Reseach Market Analyst: Managed a real-time simulated portfolio by actively tracking BSE 500 INDEX companies, conducting comprehensive research on the Indian economy, sectors, and specific companies.
   • Investment Banking: Conducted thorough research on the Indian economy, sectors, and specific companies. Evaluated investment proposals, identified high-growth startups, and played a key role in establishing a Private Equity Fund.

Projects

o **Potato Disease Classification**

Contributed to a potato disease classification project utilizing Convolutional Neural Networks (CNN), where I worked on developing a deep learning model to accurately identify and classify potato plants affected by early blight, late blight, and healthy plants. The project involved dataset collection, data preprocessing, model architecture design, training, and evaluation, resulting in a model capable of making predictions on new, unseen images with high accuracy [Code]

o **Food Ordering Chatbot**

Designed and developed a conversational chatbot for a food delivery system using Dialogflow, enabling customers to order food, calculate bills, and track orders seamlessly. The project involved creating intents, entities, and contexts to understand user requests, integrating with a Python and FastAPI backend to process orders, and interacting with a MySQL database to manage orders and customer information. The chatbot's capabilities included processing food orders, calculating bills, providing order tracking updates, and handling customer inquiries, resulting in a streamlined and efficient food delivery experience. [Code]

o **IOT based Air Quality Monitoring System**

Developed a real-time air quality monitoring system using IoT technology and ThingSpeak, enabling the tracking of environmental air quality parameters such as temperature, humidity, and pollutant levels. The system utilized sensors to collect data, which was then transmitted to the cloud for analysis and visualization. I designed and implemented a dashboard to display real-time data, providing insights into air quality trends and enabling data-driven decisions to improve environmental health and safety [Code]

o **Hand Gesture Detection System**

Built a low-cost hand gesture-controlled laptop using Arduino and Python(PyautoGui) for individuals with physical disabilities, implementing actions such as play/pause, fast forward, rewind, and volume control with hand gestures.

[Code]

Skills

Languages: Python, Java,C , C++
Web Development Frameworks: Django, React JS , HTML, CSS
Machine Learning Frameworks: Numpy, Pandas, Scikit-learn, Tensorflow, Matplotlib, PyTorch
Databases: MongoDB, MySQL
Cloud Technologies: Azure, Google Cloud Platform
Other Technologies: Linux, Android, Figma, Notion, Git

Cerifications

• Enterprise Automation Certificate from Workato.
• Google Cloud Computing Foundations: Cloud Computing Fundamentals. [profile]
• Accenture North America – Data Analytics and Visualization Job Simulation.
• NPTEL Google Cloud Computing Foundations

Volunteer Experience

• Campus Ambassador, International Model United Nations (IMUN)
Represented IMUN on campus and promoted the organization's mission and events to students
• Robotics Department Head at Bionary Club at VIT Chennai
 Conducted workshops for Robotics and Machine learning. Managed a team of around 20 students to do embedded projects.
• UI UX Designer at VITEACH Club Vit Chennai
• Management Team Member at IEEE Medicine and Biology Society.