Ramya Bagepalli

Professional Summary

A postgraduate student at the University of Southampton, pursuing a Master's in Artificial Intelligence. Holds a Bachelor's degree in Computer Science and Engineering with Honours with strong foundations in Artificial Intelligence, Machine Learning, Deep Learning, and Cybersecurity. A confident communicator with natural leadership qualities, excellent time management, and multitasking skills. Passionate about leveraging AI to solve real-world challenges and open to collaborative research and innovation opportunities.

Technical Skills

- Programming Languages: Python, Java, C++, C
- AI & Machine Learning Frameworks: TensorFlow, Keras, PyTorch, Scikit-learn
- o Deep Learning & Computer Vision: OpenCV, CNNs, RNNs, Transfer Learning, Image Processing
- o Data Science & Analytics: NumPy, Pandas, Matplotlib, Seaborn
- Natural Language Processing: NLTK, spaCy, Transformers
- o Model Deployment & MLOps: Flask, FastAPI, Docker, AWS
- o Databases: MySQL, Firebase, MongoDB, NoSQL
- o Tools & Environments: Git, Jupyter Notebook, Google Colab, VS Code, Cursor, Anaconda, Hugging Face

Education

University of Southampton

Sept 2025 - Sept 2026

MSc in Artificial Intelligence

Coursework: Machine Learning Technologies, Deep Learning Technologies, Computer Vision, Image Processing, NLP, Intelligent Agents

Global Academy of Technology

Dec 2021 - July 2025

B.E. in Computer Science and Engineering with Honors

- o CGPA: 8.88/10.0
- Coursework: Operating Systems, Software Engineering, Data Structures, Computer Networks, Big Data Analytics, AI ML, Ethical Hacking, Digital Image Processing, Human Computer Interaction

Internships

AI and IOT Engineer Intern

Bangalore, India

Sathyalogy Solutions Ltd.

2025

 Worked on projects related to sensor integrations, machine learning deployment and automation solutions in IOT deployment.

Cyber Security Intern

Bangalore, India

Ace Designers Ltd.

2024

 Conducted Vulnerability Assessment and Penetration Testing on various networks, IP addresses, and websites to identify various potential security weaknesses.

Publications

Assessing the Impact of Regularization and Optimizers on CNN for Human Emotion Detection: An Evaluation Approach (Journal)

 ${\rm Mar}~2025$

Projects

Crafting and Interpreting Forensic Face Illustrations

2025

- Developed a two-part forensic facial illustration system comprising a sketch recognition module that matches uploaded sketches with a facial database using image processing.
- Built a face crafting tool enabling users to create composite faces from verbal descriptions using modular facial features. Integrated computer vision and user interaction for real-world forensic applications.
- o Tools Used: Python, OpenCV, TensorFlow, Keras

Plant Disease Detection

2024

- Developed a machine learning model to detect and classify plant diseases from leaf images using convolutional neural networks (CNN).
- Implemented preprocessing and image augmentation techniques for improved accuracy and robustness.
- Tools Used: Python, TensorFlow, Keras, OpenCV

Human Emotion Detection

2024

- o Designed a deep learning model to classify human emotions from facial expressions in images and videos.
- Utilized CNN architectures for feature extraction and emotion categorization.
- Tools Used: Python, TensorFlow, Keras, OpenCV

Chatbot – Food Delivery App

2022

- Built an interactive chatbot system for food delivery with real-time response and menu selection capabilities.
- Enhanced user interaction using natural language processing for smooth order handling.
- o Tools Used: Python, Flask, NLP, Dialogflow

Airline Reservation System

2021

- $\circ\,$ Developed a Java-based airline reservation system for real-time seat booking and customer management.
- Implemented flight scheduling, booking confirmation, and user-friendly interface for seamless operation.
- o Tools Used: Java, MySQL

Achievements and Certifications

- Completed a Value-Added Program on Deep Learning at Global Academy of Technology.
- Recognized for excellence in leadership as Core Head for College Fest Interact (2022–2024). Served as Sports Head for department fest – Genesys 3.0.
- Represented institution as a National-Level Netball and Cestoball Player.
- Certificate of Achievement for Excellence in Sports for three consecutive years for participation in district, state, and national level tournaments.
- Participated in **Community Services** including educating children in government schools, promoting awareness on rainwater harvesting, food packaging, and cleanliness awareness programs.
- Completed multiple certifications in Cybersecurity, Data Science, Machine Learning, and Deep Learning through Infosys Springboard, IBM, and Global Academy of Technology.
- Awarded Python and Java Programming Certificates from Verzeo (Microsoft) and Infosys Springboard.