# LAKSHMAN KRUTHIK MANUBOLU

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#### **EDUCATION**

**Master of Engineering in Computer Science** 

Oregon State University

GPA: 3.91/4.0

**Bachelor of Technology in Computer Science** 

Amrita Vishwa Vidyapeetham

CGPA: 7.26/10

Sept 2023 – Mar 2025 Corvallis, Oregon, USA

July 2017 - May 2021

Bengaluru, India

### **SKILLS**

Technical Skills

Python, Java, C++, C, JavaScript, HTML, CSS, SQL, Bash, Git, Agile, Jira, JSON, Machine Learning,
Deep Learning, NLP, Data-Structures, Linux, PowerShell, MongoDB, Google Firebase, Haskell, OpenGL

Tools/Frameworks
PyTorch, Pandas, Numpy, Scikit, OpenCV, React, Angular, Node.js, Express.js, Cisco Packet Tracer

Soft Skills

Adaptability, Problem Solving, Teamwork, Communication, Mentoring

#### **WORK EXPERIENCE**

Academic Mentor Nov 2022 - Sept 2023

BDFL Technologies/10x Academy, Hyderabad. Telangana, India

- Interacted with students regarding the classes for UI Development and Data Structures.
- Evaluated their understanding and assigned web development and machine learning projects.
- Led a team to review the performance of students and analyze the weaknesses of a particular student.
- Successful in increasing the student's ability to solve complex problems by 15% after each week's mentoring sessions.

## **Application Developer**

July 2021 - Aug 2022

Tata Consultancy Services, Bengaluru, Karnataka, India

- Engaged in a User Experience(UX) TV application project associated with Comcast. The application is made with a Javascript framework (LightningJS).
- Created a testing application named MIDAS that uses React JS and Express JS. The application is used for testing various TV applications.
- Analysed the performance of Xfinity set-top boxes that were developed using ReactJs and LightningJs respectively using Bash Script

#### **PROJECTS**

- Analysis of Membership Inference Attack (Feb 2024). Oregon State University, Corvallis. This is a study that
  evaluates metric-based attack models against the MemGuard defence method using the Purchase 100 dataset. Results
  show a significant reduction in attack accuracy, challenging the universal effectiveness of such attacks. Key findings
  reveal dataset-specific variations in defence performance.
- Plant Disease Detection Using Image Processing (May 2021). Amrita Vishwa VidyaPeetham, Banglore. Created a
  software that can find the diseases in plants at early stages to reduce crop damage by use of image processing techniques
  and deep learning techniques. The programming language is Python and Keras and Tensorflow for defining neural
  networks.
- **Drowsiness Detection System For Drivers** (Jan,2020). Amrita Vishwa VidyaPeetham, Banglore. Developed the system which gives warning messages to the drivers to ensure the safety using eye blinks and eye closure. The Haar Cascade Classifier has been used to detect the face and eyes of the driver.
- **Breast Cancer Detection Using Thermography** (May, 2020). Amrita Vishwa VidyaPeetham, Banglore. Built a software that can identify the abnormalities in a breast during the early stages to reduce the cause for cancer. Convolution neural networks are used for creating the model. The programming language is Python and Keras and Tensorflow used for defining neural networks.
- Warning System For Drivers (Jan,2020). Amrita Vishwa VidyaPeetham, Banglore. Developed the appropriate warning messages for the drivers to ensure the safety using Deep Learning techniques like python. A pre-trained model for detecting the object and Haar Cascade Classifier is used for traffic sign board detection and crowd detection.
- Airline Reservation System (September, 2019). Amrita Vishwa VidhyaPeetham, Banglore. Depicted the web application using HTML, CSS and Javascript. The user will buy the tickets from a particular airline on a certain date and pay as per the ticket. Firebase is utilized as the database.
- Stock Management System (September, 2018). Amrita Vishwa VidhyaPeetham, Banglore. Depicted the interface using HTML and CSS between the stock manager and the user. The user will buy the items from stock and pay as per the list. MySQL is utilized as the database and the connectivity is done using PHP.

## **CERTIFICATIONS**

- Certified in Data Science using Python from Udemy in the year 2023 Certificate
- Certified in Full Stack Web Development from Udemy in the year 2025 <u>Certificate</u>