

Sanjay Shanbhag

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EDUCATION

Master of Science in Computer Science

August 2021 - Present

University of Central Florida | Orlando, FL | 3.92 GPA

Bachelor's in Electronics and Communication Engineering

July 2015 - July 2019

Acharya Institute of Technology | Bangalore, India | 8.01 GPA

TECHNICAL SKILLS

Programming: C, C++, Python, HTML and CSS, PHP

Frameworks and Technologies: Artificial Neural Networks, Computer Vision, Deep learning, Azure Cognito services, Image Processing, Machine learning, Keras, TensorFlow, OpenCV, ONNX, CNN, Linux, Pytorch, Git (Version Control), postman, Open vino, Scikit-Learn, Pandas, Embedded Systems (Raspberry pi, Arduino, ESP32, IP and Analog cams), ROS (Robot Operating system)

PROFESSIONAL EXPERIENCE

Data Science Engineer

August 2020 - July 2021

AIndraLabs Pvt Ltd | Bangalore, India

- Learned new skills and applied them to daily tasks, improving efficiency and productivity and carried out day day-day duties accurately and efficiently
- Communicated with ## clients to provide weekly updates on the progress of relevant projects
- Improved the **FPS to 25** for a computer vision application by utilizing quantization on deep learning models.
- Worked on "REVERSE VENDING MACHINE" for bottled beverages which included training an intra-class classifier on Nvidia-GPU for bottles with 150 classes.
- Designed a 360-degree Barcode scanning system with unique barcode detection system.
- Increased the overall accuracy of "WOODLOG FACE RECOGNITION", by a margin of **5%** using "**Soft Attention Mechanism**" using VGG Attention and Res Attention models.
- Found out a method to visualize the learnings of CNN using **GRAD-CAM** (Applicable to Explainable-AI)
- PEOPLE ANALYTICS, which is basically in-store analytics which involves getting insights of the store like consumer count, staff count, group count, age, and gender etc.

Embedded Software Engineer

September 2019 - August 2020

Sigsenz Technologies Pvt Ltd | Bangalore, India

- Prepared detailed reports on updates to project specifications, progress, identified conflicts and team activities
- Managed technological issues for assigned projects, increasing customer satisfaction with on field service.
- Worked on "FACE RECOGNITION APP" for the driver face recognition using **FACENET** with various features like Face absence detection, 2 level Facial verification using azure cognitive services, OTA update feature etc.
- Single-handedly trained a MULTI CLASS OBJECT DETECTOR (seatbelt, mobile-usage, drowsiness, facial mask detection) for the driver Analytics.
- INDUSTRIAL SURVEILLANCE using FACE RECOGNITION algorithm for a food industry with a periodic telegram alert system.
- OFFICE SURVEILLANCE using multi overhead camera setup utilizing **Ultra-Light 1 MB** model for smoother FPS.
- People Counter for driver cabin using **Mobilenet-V2** architecture with OpenCV framework.

INTERNSHIP AND PROJECT EXPERIENCE

Old Dominion University Internship program | Acharya Institute of Technology

2018

Driver Drowsiness Detection | Acharya Institute of Technology

2019

Electronic testing and Development Pvt. Ltd | Bangalore, India

2019

Neural Networks and Deep Learning | Coursera

2020

Improving Deep Neural Networks | Coursera

2020

Structuring Machine Learning projects | Coursera

2020

Introduction to Containers w/ Docker, Kubernetes, OpenShift | Coursera

2020

Ebay 2021 University Machine Learning Competition | eBay ML competition

2021

Working on Video Segmentation for autonomous driving | University of Central Florida

2021

Working on Autonomous driving project (RTIS research lab)

2021

Build Basic Generic Adversarial networks (GANs) | Coursera

2021

ON-CAMPUS ACTIVITIES

Active Member of Member of IEEE UCF University of Central Florida	2021
Student worker at UCF Dining services University of Central Florida	2021
Organizing Member of UCFKAT (Knights Auto Team) Autonomous Driving Community	2022
Graduate Teaching Assistant Introduction to Robotics	2022