

# SHAMINI KORAVUNA

in







**(**+49 17655204246

• Ingolstadt, Germany

### **WORK EXPERIENCE**

## 04/2020 - 09/2020

#### **Associate - Machine Learning Trainer**

Robokalam Technologies, Hyderabad, India

- Provided assistance in curriculum development on Data Science, Machine Learning, and Deep Learning with python.
- Designed, developed, optimized: Computer Vision, Machine Learning, Deep Learning models and algorithms that can be used to train graduates on edge devices.
- Trained 350+ graduates in Machine Learning and Computer Vision using python.
- Lead the research on "Educational Gamification and Artificial Intelligence for Promoting Digital Literacy and Effective User Engagement in the Online Learning Management System".

## 06/2019 - 12/2019

## Freelancer Deep Learning Engineer – Master Thesis

Audi Electronics Venture GmbH, Gaimersheim, Germany

- Literature research to find the state-of-the-art human pose estimation methods.
- Fine-tuning the 2D pose detector model with different sensor modalities.
- Used a student-teacher approach to transfer the pose estimation to other sensor modalities.
- Integrated the test results.

Tools Used: Docker, HDF5Viewer, Kubernetes, OpenCV, PyCharm, TensorFlow

#### **EDUCATION**

#### 10/2020 - Present

#### Machine Learning Engineer – Nano Degree

Jdacity

- Learning machine learning techniques and algorithms -- including how to package and deploy the models to a production environment.
- Gaining practical experience using Amazon SageMaker to deploy trained models to a web application and evaluate the performance of the models.
- Learning how to update the models as we gather more data.

## 11/2016 - 09/2020

## **Master of Science in Embedded Systems**

Chemnitz University of Technology, Chemnitz, Germany

 Computer Vision, 3D Image Processing, Hardware/Software-Codesign, Real-Time Systems, Design of Software for Embedded Systems, Software Platforms for Automotive Systems, Smart Sensor Systems, EDA-tools, Components and Architectures of Embedded Systems.

Research project: 3D Human Pose Estimation using Deep Neural Networks.

**Master Thesis:** 3D Human Pose Estimation using Different sensor Modalities at Audi Electronics Venture GmbH, Ingolstadt, Germany

#### 09/2011 - 06/2015

#### **Bachelor of Engineering in Electronics and Communication Engineering**

Osmania University, Hyderabad, India

 Computer Networks, Digital and Analog Electronics, Digital & Analog Communication, Automatic Control Systems, Microprocessor & Microcontroller, Digital Image Processing, Global Positioning Systems.

**Bachelor Thesis:** Implementation of Visible and Invisible Video Watermarking Technique.

#### **SKILLS**

Languages	English	****	German	****
Teaching		****		
Programming	Python	****	C++	****
	С	****		
Framework	TensorFlow	****	Keras	****
	PyTorch	****		
Libraries	OpenCV	$\star\star\star\star\star$		

# **CERTIFICATIONS**

09/2019 - 10/2019	Image Recognition with Neural Networks at Udemy Education
01/2019 - 02/2019	Crash Course in Deep Learning with Google TensorFlow Python at Udemy Education
12/2018 - 02/2019	Complete Guide to TensorFlow for Deep Learning with Python at Udemy Education
12/2018 - 02/2019	Complete Guide to TensorFlow for Deep Learning with Python at Udemy Education

## **PROJECTS**

## **German Traffic Signs Recognition using CNN and Keras**

- Designed a CNN model for recognizing German traffic signs.
- Achieved an accuracy of 94.33%.

**Project Link** 

#### Multiple Human Identifier and Counter in Real-Time

- Designed an efficient human counter using HOG and OpenCV.
- The model takes images, videos or even live camera as input for detecting and counting humans.

**Project Link** 

# Real-Time Driver's Drowsiness Detection using Machine Learning

- Designed a robust model for predicting whether the driver is drowsy or not in real-time.
- The system alerts the driver with an alarm when he/she is drowsy.
  Project Link

# **Classification of Car Brand using Deep Learning**

- Created the classification algorithm by transfer learning and fine-tuning Inception-V3 model using cars dataset from Stanford.
- The model is able to recognize 195 classes of cars with an accuracy of 83.94%.
  Project Link

#### **PUBLICATIONS**

- Shamini Koravuna, Uday Kumar Surepally "Educational Gamification and AI for Promoting Digital Literacy". In Proceedings of 2nd International Conference on Intelligent and Innovative Computing Applications (ICONIC'20). ACM, New York, NY, USA. 2020.
- Surepally Uday Kumar, K. Shamini "Smart Remote for the Setup Box Using Gesture Control" in International Journal of Research and Application ISSN: 2248-9622, Vol. 6, Issue 4, (Part - 3), pp.18-25. 2016.
- K. Shamini, C. Bhagya, M. Sri Sowmya "Implementation of a Visible and Invisible Video Watermarking Technique" in International Journal of Engineering and Computer Science ISSN: 2319-7242 Volume 4 Issue, Page No. 11754-11760. 2015.