CURRICULUM VITAE

PERSONAL DETAILS

Name	YADAV, AKASH
Address	Hauptstraße 178,
	33647, Bielefeld, Deutschland
Telephone	(49) 176 / 35262864
E-Mail	ayadav10491@gmail.com
Nationality	Indian
Date of Birth	10.04.1991
Profile	**Github-Portfolio** **LinkedIn** **Xing**

WORK EXPERIENCE

▷ **February 2021 - present**
○ Employer
○ Department
○ Major Tasks

Software Developer

Capgemini Engineering, Wolfsburg (Volkswagen Extern)
Digital Engineering - Digital Continuity & Manufacturing

- Product Development Automation through Windows & Web Apps
- Requirement Collection in Collaboration with Product Owner
- Software Architecture Creation, Selection of Design Patterns
- Agile software development through SCRUM
- API development
- Database Automation [Entity Framework, JSON, XML, CSV]
- Unit Testing
- Tools: C#/.NET Core , Visual Studio, Git, Azure DevOps

▷ **April 2019 - January 2021**
○ Employer
○ Department
○ Project
    ○ Phase 1

    ○ Phase 2

    ○ Phase 3

Research Assistant (AI & System Development)

Technische Universität Kaiserslautern
Institute for Wireless Communication and Navigation (WiCoN)

Drone Development for Landscape Analysis
Requirement Analysis, System Development, Creating BOM, System and Sensor Integration

Masters Thesis: Semantic Segmentation of Aerial Scene

- Creation of Dataset and Image Processing
- Training using **Tensorflow** and Compression of Model using **TFLite** & **TensorRT**
- Integration with **Jetson Nano** & **Intel RealSense** Camera

Implementing **Weed Object Detection** using **Tensorflow**

▷ **Nov 2018 - March 2019**
○ Employer
○ Department
○ Major Tasks

Internship (Radar Software Development)

Robert Bosch GmbH, Leonberg
Engineering Software & System Assisted 2

- ADAS Test Automation to Evaluate System Performance
- Radar & Camera Synchronization
- Image & Signal Processing
- Participation in Data Collection on Test Tracks
- Tools: Matlab, Python, CANape(Vector), Git, DOORS

▷ **April 2018 - Oct 2018**
○ Institute
○ Major Tasks

Internship (Driver Assistance Function Development)

Robotics Research Lab, Technische Universität Kaiserslautern
Edge Compaction of the Road Roller

- Study of Behaviour-based Control Strategy and Fusion
- Study of Autonomous Vehicle Architectures & Remote Interfaces
- Implementation of Trajectory Control Strategies
- Simulation of the Road Roller on Unreal Engine

EDUCATION

▷ Oct 2016 - Sept 2020
○ University
○ Competencies

○ Grade
○ Master Thesis

Master of Science in Commercial Vehicle Technology

Technische Universität Kaiserslautern

Automotive Software Engineering, Autonomous Robots, Computer Vision, Product Development, Electromobility
2.1
Semantic Segmentation of Aerial Scene (Grade: 1.0)

▷ Oct 2014 - Aug 2016
○ Institute
○ Competencies
○ Master Thesis
○ Grade

Master of Engineering in CAD/CAM/CAE

Shri G.S Institute of Technology and Science

Product Development, CAx and Automation, Mechatronics
Robotic Arm Automation using Machine Learning
8.45/10 [German Equivalent 1.66]

▷ July 2009 - June 2013
○ University
○ Bachelor Project
○ Grade

Bachelor of Engineering: Mechanical Engineering

Rajiv Gandhi Proudyogiki Vishwavidyalaya
Steering Control of Omni-directional Robot
75.93/100 [German Equivalent 2.0]

CERTIFICATIONS

Microsoft — Azure Fundamentals
University of Toronto (Coursera) — State Estimation & Localization for Self-Driving Cars
deeplearning.ai (Coursera) — Convolutional Neural Networks
NVIDIA Deep Learning Institute — Getting Started with AI on Jetson Nano
Google Cloud (Coursera) — Intro to Tensorflow
Google Cloud (Coursera) — Launching into Machine Learning
Google Cloud (Coursera) — How Google does Machine Learning
HCL — OOPs using C++

PROJECT LIST

Multi-Robot Formation Control using Graph Theory (2018)
- Trajectory Tracking
- V2V Communication System Analysis
- Implementation with Graph Theory [Tools: Matlab, Simulink]

3D Computer Vision (2018)
- Literature Research for "Variational Sceneflow Estimation"

SKILLS

Operating System	Windows, Linux
Programming	C# / .NET, Python, C++, Matlab
Database	Entity Framework, XML, JSON, CSV
Robotic Framework	Finroc
Version Control	Git, Mercurial, Azure DevOps
ML Frameworks	Tensorflow, Tensorflow Lite, TensorRT, Keras
Embedded Devices	Raspberry Pi, Nvidia Jetson
Other Software	Simulink, Unreal Engine

LANGUAGES

English	Fluent
German	Intermediate (B1)
Hindi	Mother Tongue