

Berlin, Germany

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# Summary \_\_\_

I am a Embedded System Engineer specializing in Product Development with 10+ years of experience.

Software Programming: C, C++, Python, Bash

DevOps: Docker, Qemu-KVM, Kubernetes, Prometheus, Grafana, Salt, GCP, Gitlab-CI, Airflow, Jenkins, OpenShift.

Hardware: Kicad, nMigen, FPGAs, ASIC(MCU and MPU)

## Work Experience \_\_\_\_\_

#### Mbition, Daimler

Berlin, Germany

EXPERT SOFTWARE ENGINEER

August 2020 - Present

• Implement algorithms in perception, sensor fusion, planning, physics/traffic simulation and computer vision. Firmware development for sensor calibration and fusion, on-line monitoring to detect out-of-calibration sensors, turn signal detection, etc. Improving behavioral prediction of traffic participants, e.g. through learning traffic behavior patterns from data, or by incorporating turn signal information.

1 und 1, IONOS Berlin, Germany

System Engineer

June 2018 - August 2020

Assist in developing core virtualization features and stronger QEMU support for x86 virtualization, such as improving migration,
 virtio and debugging features. Assist other team members in developing and upstreaming changes to QEMU and the Linux kernel.

Nvidia Hyderabad, INDIA

System Engineer

Mar 2017 - June 2018

• Develop HAL layer and drivers for NVDLA(Nvidia Deep Learnin Accelerator) to accelerate computational tasks, such as machine learning, engineering workloads, and scientific computing on Nvidia Tegra ARM chipset. Added support for multiple GPUs, dGPU and host memory allocations getting shared between GPUs. Added support for user-mode API interfaces and libraries necessary of host applications to launch compute kernels to CUDA kernel agents.

Aricent, Altran Gurgaon, India

SENIOR SOFTWARE ENGINEER

Jan 2015 - Feb 2017

• Developed a highly accurate prototype of Action Camera Device with 3D Capture Mapping, pattern recognition and object detection from captured scenes using Caffe over TensorRT. Integrated with display stack supporting 2D 3D graphics over Linux Android HAL. Panel bring-up for MIPI DSI and eDP with multiple vendors like Novatek, LG, Sharp, Panasonic etc. Ported OpenCore based OpenMax (OMX) codecs for accelerated decoding.

Safenet, Gemalto Noida, India

SOFTWARE ENGINEER

Dec 2013 - Jan 2015

• Porting proprietary Encryption Linux Filesystem Driver the filesystem driver to newer kernel versions. Development of container based build system for building the driver on different Linux distros simultaneously and package them in a single rpm/deb. Responsible for Debugging file system issues and Bug fixes and verification.

AE Telelink Systems

New Delhi, India

SOFTWARE ENGINEER

Jan 2012 - Dec 2013

 Developed firmware for Voice Logger product used for storing audio data. Developed FAT file system enabling logging of voiced calls in MP3 format.

## Education \_

## Centre for Development of Advanced Computing

Noida, U.P., India

Post-Graduate Diploma Embedded System and VLSI Design

July. 2011 - Dec. 2011

## IILM College of Engineering and Technology

UPTU, Lucknow, U.P., India

Bachelor of Engineering in Electronics and Communication

Aug. 2007 - July. 2011