# SHREYAS RAMAKRISHNA

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#### **EDUCATION**

Vanderbilt University

Nashville, Tennessee

Ph.D. in Electrical Engineering

Aug 2017 - Present

Research Affiliation: Institute for Software Integrated Systems

Overall GPA: 3.6/4

Technical University Kaiserslautern

Kaiserslautern, Germany

Masters in Electrical engineering and Information Technology

June 2015

Overall GPA: 3.65/4 (Converted German grades)

Visvesvaraya Technological University

Bangalore, India

Bachelor of Electrical and Communication Engineering

July 2012

Overall percentage: 84

Coursework: Machine Learning, Reinforcement Learning, Cyber Physical Systems, Embedded Systems, Distributed Systems, Operating Systems, Networking.

#### PROFESSIONAL EXPERIENCE

Apsis Solution

Bangalore, India

Embedded Design Engineer

Sep 2015 - March 2017

- · Designed Embedded Software for several military and commercial products.
- · Involved in integration and software testing of embedded platforms.
- · Experience with programming embedded platforms like PIC, ARM and Raspberry Pi.

## MasterSkills Learning Solutions

Bangalore, India

Research Intern

Feb 2012 - May 2012

- · Intern project "Mixed mode Real-time VLSI implementation of a shunting inhibition cellular neural network".
- · Involved in designing circuits, VHDL code development and testing.

# PHD RESEARCH

### **DARPA** Assured Autonomy

March 2018-Present

- · Designed tools for system level safety assurance and dynamic risk assessment for autonomous vehicles.
- · Designed deep learning regression and classification controllers, and unsupervised learning anomaly detectors.
- · Involved in designing automation tools for design, development and testing of autonomous vehicles.
- · Experience with simulators like TORCS, CARLA, and real datasets like NuScenes, Ford and Waymo.

### TEACHING EXPERIENCE

· Introduction to Computer Engineering

Aug 2017

· Operating System

Jan 2018

· Resilient Distributed System

Aug 2018

#### TECHNICAL SKILLS

Programming

Python, C. and Java (basic).

Machine learning

TensorFlow, Pytorch, Keras, Numpy, Scipy, and Scikit-learn.

Cloud & Database Hardware Platforms Amazon Web service, Google Cloud platform, MongoDB, and InfluxDB.

Raspberry Pi, NVIDIA Jetson, PIC and ARM Cortex M3. Tools & Editors

**Operating Systems** 

Spark, Docker, Jupyter, Conda, PyCharm, Git, Latex, and Microsoft Office.

Windows, Linux, and MAC OS X.

### **ACHIEVEMENTS**

- · Publication "Augmenting Learning Components for Safety in Resource Constrained Autonomous Robots." nominated for best paper at ISORC 2019.
- · Awarded tuition scholarship for undergraduate studies by the Ministry of HRD, Govt. of India.