SHREYAS RAMAKRISHNA

% https://www.shreyasramakrishna.com/ https://www.linkedin.com/in/shreyasramakrishna/

EDUCATION

Vanderbilt University

Nashville, Tennessee

Ph.D. in Electrical Engineering

Aug 2017 - Present

Research Affiliation: Institute for Software Integrated Systems

Overall GPA: 3.7/4

Technical University Kaiserslautern

Kaiserslautern, Germany

Masters in Electrical engineering and Information Technology

June 2015

Overall GPA: 3.65/4 (Converted German grades)

BNM Institute of Technology (VTU Affiliated)

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 Solutions

Bangalore, India

Embedded Design Engineer

Sep 2015 - May 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 (Unpaid)

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 of autonomous vehicles.
- · Designed deep learning regression and classification controllers, and time-series anomaly detectors.
- · Involved in designing automation tools for design, development, and testing of autonomous robot testbeds.
- · 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

Amazon Web service, Google Cloud platform, MongoDB, and InfluxDB.

Hardware Platforms Tools & Editors

Raspberry Pi, NVIDIA Jetson, PIC and ARM Cortex M3.

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

Operating Systems 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.