Parwesh Rallapalli

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EDUCATION

Michigan State University | East Lansing, MI

Bachelor of Science in Computer Engineering *Graduation Date: December 2019*

- GPA: 3.44
- Relevant Coursework: Embedded Smart Sensor Systems, Object-Oriented Software Design, Computer Architecture, Operating Systems, Compilers

PUBLICATION

Oliver Jakob Arndt, Parwesh Rallapalli, Hodger Blume. "Portable implementations for heterogeneous hardware platforms in autonomous driving systems." *Big Data Analytics for Cyber-Physical Systems: Machine Learning for the Internet of Things,* Elsevier, 2019, 113-143

CERTIFICATIONS

Fundamentals of Deep Learning for Computer Vision by NVIDIA | NVIDIA Deep Learning Institute | March 19, 2019

- Processed image classification and recognition datasets using NVIDIA DIGITS with TensorFlow

Machine Learning by Stanford University | Coursera | June 20, 2017

- Applied logistic regression, SVMs, neural networks for machine vision, database mining, image recognition

EXPERIENCE

ECE Department, MSU College of Engineering

Research Assistant *March 2019 – April 2019*

- Designed a **deep-learning CNN** to classify movie posters by genre with **web-scraping and data pre-processing**
- Assisted graduate student in development of an **LSTM AI** for transcribing sign language from video to text

Institute of Microelectronic Systems, Leibniz Universität Hannover, Germany

Research Assistant *May 2018 – July 2018*

- Researched experimental solutions for automatic **parallelization** and abstraction of **portable C/C++ applications** for **high-performance computing**, **FPGAs**, etc.
- Analyzed and investigated the abstraction, profiling, and portability capabilities of popular frameworks such as **OpenMP, OpenCL, CUDA** for scientific publication and presented findings at institute

Harman International (Samsung Electronics)

Software Engineering Intern *May 2017 - September 2017*

- Prototyped a **machine learning** algorithm to parse Android system logs
- Created CAN signal commands using RAFT for executing 1000+ vehicle software tests and bug fix validation
- Developed application using **C#** with VMMServer to automate hardware configuration, saving test time

CSE Department, MSU College of Engineering

Undergraduate Learning Assistant & Peer Leader *Aug 2016 - May 2017*

- Collaborated with professor and other ULAs to plan weekly course activities for CSE 291 course
- Interacted with students extensively to ensure mastery of **Python** programming, building confidence in problem-solving skills for newcomers to CSE community

AerBots Inc.

Division Co-Founder & Product Development Engineer *Nov 2016 - January 2017*

- Developed and designed fully-functioning **drone prototypes** for MSU-partnered startup with $400K valuation
- Constructed **website with interactive configurator web app in JavaScript**, and marketing material for funding pitch and product launch, creating public excitement and early offers for product up to $500 per unit

TECHNICAL SKILLS & PERSONAL PROJECTS

- Organized team as **team captain** to win **4th out of 36 teams** at **Google Games** competition at MSU (Oct 2017)
- **Proficient** in Python 3, C/C++11, MATLAB , C#, Java, Git, Adobe ActionScript, HTML5, CSS, Adobe Creative Suite, OpenCL, OpenMP, GameMaker, linear algebra, embedded devices, Linux/Unix, Google Cloud Platform
- **Some** Unity 3D, 3DSMax, Maya, CUDA, Amazon Web Services
- **12 years of mastery** with various traditional and **computer animation** methods, including 2D, 3D, stop-motion, frame-by-frame, and tweening with **3D modeling and rigging**
- Programmed and designed all assets for **Windows video games** using the **GameMaker engine**