JESHWANTH CHALLAGUNDLA

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EDUCATION

M.S. Electrical Engineering

University of Texas at Arlington, Arlington, Texas. GPA: 4/4

Aug 13-May 15

Received Image Processing and Neural Network Lab scholarship

Thesis: Adaptive Multiple Optimal Learning Factors for Neural Network Training

- The algorithm uses Newton's method to compute multiple learning factors, each associated to a group of weights to train a multi-layer perceptron
- The number of learning factors computed, adaptively changes in each epoch to increase computational efficiency

B. Tech. Electrical and Electronics Engineering

Pondicherry Engineering College, Puducherry, India. GPA: 8.4/10

Aug 9-May 13

WORK EXPERIENCE

Machine Learning Software Engineer

Google, Mountain View, CA

Dec 19-Present

• Develop and productionize ML solutions to personalize Google Assistant

Autonomous Driving Software Engineer

General Motors, Warren, MI

May 17-Nov 19

- Developing Scene Provider module that fuses information from perception, mapping and localization to create a wholistic driving scene
- Developed a systematic approach, for optimizing deep neural network architecture and hyperparameter tuning using Taguchi orthogonal arrays (DFSS Green Belt project)
- Implemented and benchmarked deep neural networks for pixel wise scene segmentation on public and internal datasets

Embedded Software Engineer

Magna Electronics, Auburn Hills, MI

Feb 16-Apr 17

- Benchmarked inhouse computer vision chip against Mobileye EyeQ3
- Developed a closed loop test system for front camera module advanced driver assistance features like lane keep assist and collision mitigation braking

Embedded Software Engineer Engineering Trainee Intern

Jun 15 – Feb 16

Sep 14 – May 15

UHV Technologies Inc., Fort Worth, TX

Aluminum Alloy Sorter using X-Ray Fluorescence, ARPA-E

- Trained neural network to classify X-Ray Fluorescence data of aluminum alloys
- Worked on a vision system that estimates the size of aluminum pieces moving on the conveyor belt
- Automated the sorting system using LABVIEW and NI-6008

PROJECTS

Driving behavior cloning

Used image augmentation techniques to generate more data with non-zero steering angle.

Trained convolutional neural network to estimate steering angle from front camera images. The network is then used to drive a car in simulator

• Object tracking using Unscented and Extended Kalman Filters

SKILLS & SUMMARY

Programming: C++, Python, MATLAB

Platform | Framework: Tensorflow, ROS, OpenCV, Linux, CI (Travis, Jenkins), Git

Areas of Interest: Programming, Machine Learning, Deep Learning, Autonomous Driving