Phone: (+1) 614-852-1763

Ohio State University, Columbus

Address: 567 Stinchcomb Dr, Apt 1, Columbus, OH, 43202.

OBJECTIVE

Seeking a challenging career in the fields of Machine Learning, Autonomous Vehicles and Software Development. My research interests include applications of machine learning in autonomous vehicles and intelligent transportation systems

EDUCATION

Degree: Master of Science (Thesis) Major: **Electrical and Computer Engineering** Relevant Coursework: Theory of Statistical Learning, Autonomy in Vehicles, Game Theory, Pattern Recognition & Machine Learning, Image Processing & Computer Vision, Speech and Language Processing, Convex Optimization, Real Analysis I II, Linear Mathematics, Algorithms, Probability & Random Processes and Project Management.

Indian Institute of Technology (IIT) Hyderabad		Aug 2011 -	· May 2015
Degree:	Bachelor of Technology (Honors)	GPA:	8.22/10.0
Major:	Electrical Engineering	Honors GPA:	9.25/10.0
Relevant	Coursework: Detection and Estimation, Image and Video Processing, Informatio	n Theory, Wavele	ts

SOFTWARE SKILLS

C, C++, Python, R, OpenCV, MATLAB, Tensorflow, SQL, Git, Linux, Windows, LATFX, LabVIEW, Tableau

WORK EXPERIENCE

- The Ohio State University, Graduate Research Assistant Aug '17 - present
- Developed a software to simulate traffic conditions to enable an autonomous vehicle to navigate through the environment. • The software is intended to be a customizable api for researchers to play with and experiment with their models.
- The software was built from scratch by developing our own data structures for several layers of abstraction like road networks, driving modules, sensor suites, communication modules.
- We are currently working on reinforcement learning and dynamic programming techniques to optimize fuel consumption of the simulated vehicles.

Ford Motor Company, Dearborn, Research and Advanced Engineering Intern

- Analyzed opportunistic utilization of enterprise WiFi for AV (autonomous vehicle) connectivity
- Proposed an optimized file sharing technique to effectively utilize bandwidth for OTA software updates in AV use cases Bank of America, Hyderabad, India, Sr. Tech Associate Jul '15 - Jul '16
- Designed real-time, interactive dashboards using Tableau to present equity sales reports to business users
- Analysed equity reports for migration to Tableau environment and creation of Tableau data sources using Alteryx

RELEVANT PROJECTS

Stance Detection: Fake news challenge, Dr. Wei Xu

- Used techniques from NLP to conditionally classify if a headline agrees, disagrees or is neutral with the news body
- Implemented a hierarchical hybrid model using random forests, LSTM using tensorflow and secured 7th place in stage 1 of the Fake News Challenge, achieving a score of 0.8.

Course Recommendation Engine for OSU, HACK OHIO

- Used collaborative filtering techniques to mine the students interests and provide suggestions for coursework
- Developed a web portal for students to manage their course interests and get course recommendations

Action Unit (AU) Detection for Facial Expression Recognition, Prof. Aleix Martinez Nov '16 - Dec '16

- Applied non-linear classification techniques (kernel PCA + LDA) with an RBF kernel to detect the presence of AUs
- Compared the performance of linear classification techniques against the optimized kernel classification techniques

Age Group Classification of Facial Features, Prof. Sumohana Channappayya Jan '14- Apr '14

- Estimated the age group of a person in the facial image using their wrinkle intensity as the feature
- Used Gabor filters at varying orientations to extract the wrinkle features from the images

DISTINCTIONS

- Recipient of the 2016 J.N.TATA Endowment Scholarship for Indian Students studying abroad.
- Leader of the team representing IIT Hyderabad, that won the first Inter IIT Tech meet at IIT Kanpur, Mar '13.

GPA: 3.93/4.0

Aug 2016 - May 2018 (expected)

Nov '16

Feb '17 - May '17

May '17 - Jul '17