Pradeep Singh

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EDUCATION

SAN DIEGO STATE UNIVERSITY
MS in Data Science
Expected Dec 2019 | San Diego, CA
GPA: 3.6/ 4.0

UNIVERSITY OF MUMBAI
B. Engg. in Electronics
Aug 2011 - June 2015 | Mumbai, India

LINKS

Github:// **pradeepsinngh**
Webpage:// **pradeepsinngh.github.io**
LinkedIn:// **pradeepsinngh**
Twitter:// **@pradeep_sinngh**

COURSEWORK

MACHINE LEARNING
Speech Processing (Deep Learning)
Natural Language Processing
Machine Learning
Numerical Optimization
Parallel Computing
Computer Vision

DATA SCIENCE
Statistical Inference
Data Science & R Programming
Bayesian Statistics
Principles & Techniques of Data Science
The Foundations of Data Science

SKILLS

PROGRAMMING
Python • C• C++ • Matlab • R

DATA
SQL• Pandas • R Studio
Shiny • StatsModels • Scrapy

VISUALIZATION
Tableau • Shiny • Matplotlib
Plotly • D3.js • Seaborn

MACHINE LEARNING
TensorFlow • Keras • Numpy
NLTK • SKLearn • Gensim

PLATFORMS
Google Cloud • AWS • macOS
Linux • Windows • GitHub

RESEARCH

COMPUTATIONAL SCIENCE RESEARCH CENTER | Research Assistant
Aug 2017 – Till date | San Diego, CA

- Working on modeling and characterizing response facilitation mechanism by which insect (dragonflies) detect and react to small moving targets.

RAMAN RESEARCH INSTITUTE | Research Intern (Software)
Dec 2014 – Jan 2016 | Bangalore, India

- Parallelizing FFT/DFT on FPGA (Virtex 7) using OpenCL. A speed up of 70% in performance and a decrease of 30% in resource utilization was achieved.

PROJECTS

NEURAL MACHINE TRANSLATION | NLP/ Deep Learning [code]

- Built a end-to-end machine translation pipeline using recurrent neural network with various models: simple RNN, RNN with Embedding, Bidirectional RNN, Encoder-Decoder RNN & achieved accuracy of 98%.

IMAGE RECOGNITION USING CNN | Computer Vision [code]

- Built and trained 5 different Convolutional Neural Networks using Keras and TensorFlow to classify 70,000 fashion images into 10 labels.
- Achieved accuracy of 95% with VGG model + batch normalization.

PREDICTIVE MODELING AND ANALYSIS | Data Science [code]

- Cleaning and analyzing Countries of the World data set.
- Built a predictive model using regression models, random forest model to predict the GDP of countries.
- Visualized the results using Matplotlib and Seaborn.

DATA ANALYSIS & VISUALIZATION | Data Science [code]

- A comparative analysis & visualization of history of Olympics sports and games from Athens 1896 to Rio 2016.

SENTIMENT ANALYSIS | NLP/ Deep Learning [code]

- Built an end-to-end sentiment classification system using Recurrent neural network and Naive Bayes classifier to classify the sentiment of 50,000 movie reviews in IMDb dataset.

TOPIC MODELING | NLP [code]

- Built a generative statistical model - Latent Dirichlet allocation using Bag of Words and TF-IDF to classify one million news headlines to a particular topic.

AWARDS/ ACHIEVEMENTS

2017, 2018	University	Full Tuition Wavier + Stipend
2015	National	Research Fellowship at Raman Research Institute
2014	Undergraduate	Vice-chairperson at IEEE Student Branch
2014	Undergraduate	Founder and Editor-in-chief at KC-Xplore
2013	Undergraduate	Undergraduate Research Fellowship