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Objective - Full Time Opportunities in Machine Learning and Data Science

Education

- **North Carolina State University** — Raleigh, NC
  M.S. in Electrical Engineering — Graduation : May 2017
- **Birla Institute of Technology and Science, Pilani** — Hyderabad, India
  B. E. in Electrical & Electronics Engineering — Graduation : August 2014

Work Experience

Research Intern, Indian Institute of Science — Jan 2015 - June 2015
- Worked on face and attribute recognition in low-resolution video
- Developed Image Annotation algorithms in OpenCV to extract features frame by frame

Research Intern, Indian Statistical Institute — July 2014 - Dec 2014
- Conducted a literature study on sparse representations, non-linear prediction and zooming deblurring
- Implement multi-image super-resolution on non-overlapping low resolution images in MATLAB

Software Engineering Intern, IMI Mobile Pvt. Ltd. — Jan 2014 - June 2014
- Developed Unit Test Cases for Messaging and Voice APIs using the Feed4junit library in Java
- Developed a web application in Node.js to explore real time mobile data management with PouchDB
- Developed an E-Wallet using MongoDB to manage the monetary transactions for the Open House App

Relevant Course Projects at North Carolina State University

- **Data Mining** — Spring 2017
  - **Machine Comprehension of Text** : The paragraphs and queries from the Stanford Question and Answer Dataset were vectorized. An LSTM produced embeddings from the vectorized data which was passed to a Fully Connected(FC) layer with Softmax activation to predict the answer. (Python, ARC Cluster)
- **Probabilistic Graphical Modelling** — Fall 2016
  - **Segmentation of Forams :** Images with 80 features each, labeled pixel-wise into 5 regions are initially classified using SVM and ANN. CRF implemented to use their output and improve F1 score. (Python)
  - **Biobot Motion Detection :** 42 features are collected from a moving biobot. KNN and SVM used to classify it's motion into four classes. HMM implemented to use their output and improve F1 score. (Python)
- **Machine Learning** — Spring 2016
  - **Daytime Water Detection using Multiscale Segmentation :** Identified an optimal segmentation through statistical inference and performed segmentation of images to detect water using Naïve Bayes, SVM and ANN classifiers. Cross-validation and PCA was used to optimize the procedure. (Python, IBM Cloud)
- **Computer Vision** — Spring 2016
  - Computed affine 3D Geometry of a scene from a single perspective image (Python, OpenCV, Blender)
  - Designed and implemented the panoramic image stitching tool (C++, IFSTool)
  - Extended the Generalized Hough Transform to detect circular holes in PCB images (C++, IFSTool)
- **Object Oriented Design & Development** — Fall 2016
  - Integrated Simicheck Web Service into Expertiza (Ruby on Rails, Postgres)
  - Implemented and a Library Room Reservation System (Ruby on Rails, HTML, Postgres, Heroku)

Certifications

Machine Learning by Stanford University on Coursera. Certificate earned on January 20, 2017.

Technical Skills

Programming - Python, R, C++, Java, Ruby on Rails
Databases - MySQL, MongoDB, Postgres
Cloud Technologies - IBM Cloud, Apache Spark, Heroku
Software - MATLAB, Pycharm, Rstudio, RubyMine