Shreyash Pandey

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INTERESTS

Machine Learning, Computer Vision, Natural Language Processing, Data Science

EDUCATION

STANFORD UNIVERSITY
MS in Electrical Engineering
Expected June 2019 | Palo Alto, CA
Cum. GPA: N/A

IIT KANPUR
BTech in Electrical Engineering
2012-2016 | Kanpur, India
Conc. in Machine Learning
Cum. GPA: 9.34 / 10.0

COURSEWORK

GRADUATE
Artificial Intelligence
Algorithms
Machine Learning

UNDERGRADUATE
Probabilistic Machine Learning
Computer Vision
Data Mining
Statistical Signal Processing
Data Structures and Algorithms
Convex Optimization

SKILLS

Python • C • Matlab
Java • C++ • R
Caffe • TensorFlow • CVX
OpenCV • Scikit-learn • Arduino
NumPy • Pandas
Android • MySQL
HTML • CSS

ACTIVITIES

PROGRAMMING CLUB, IITK
As a Secretary of the club, organized workshops on Python and HTML for incoming first year students

COMPUTING EVENTS, IITK
Moderated various coding events in Techkriti, the largest technical festival of India

EXPERIENCE

SAMSUNG RESEARCH | Computer Vision Researcher
June 2016 – Aug 2017 | Bangalore, India

- Developed a photo search mobile application based on image classification by using memory efficient CNN architectures
- Implemented a false-alarm reduction method in image classification based on ground truth similarity matrix of the various labels
- Implemented a depth prediction module for 2D images by formulating it as a dense-label regression problem

SAMSUNG RESEARCH | Software Engineering Intern
May 2015 – July 2015 | Bangalore, India

- Developed an Enterprise Device Manager(EDM) android application to apply the company policies as set by IT admin, making BYOD a reality
- Received a Pre-Placement Offer in recognition of my efforts

RESEARCH PROJECTS

ZERO SHOT LEARNING | Undergrad Research
Jan 2016 – May 2016 | IIT Kanpur

- Worked with Prof Piyush Rai to survey 6 different methods of performing ZSL - prediction of a label that has not been seen during the training procedure
- Implemented two contemporary approaches which required learning a common semantic space for embedding images and labels

SALIENT OBJECT DETECTION | Course Project
Jan 2016 – May 2016 | IIT Kanpur

- Detected the most salient object in an image through semi-definite programming to get a low rank background matrix and a sparse noise matrix
- Per-pixel features were extracted using Steerable pyramids and Gabor filters

DATA VISUALIZATION IN HIGH DIMENSION | Course Project
Jan 2016 – May 2016 | IIT Kanpur

- Explored applications of convex optimization for dimensionality reduction, especially over non linear manifolds including ISOMAP, Locally Linear Embedding, Maximum Variance Unfolding(MVU) and FastMVU
- Selected as the best project in a class of about 100 students

CLASSIFICATION OF BRAIN ACTIVITY | Course Project
Jan 2015 – May 2015 | IIT Kanpur

- Trained classifiers based on SVM, GNB and kNN to distinguish whether a subject is looking at an object or reading a sentence based on their fMRI data
- Implemented feature engineering over extremely high dimensional, sparse and noisy data to improve the classification performance

ACHIEVEMENTS

2016 Academic Excellence Award for distinctive performance in two consecutive terms
2015 Top 4% in Kaggle competition - Forest Cover Type Prediction
2014 Selected as Academic Mentor for the course - Fundamentals of Computing
2013 Ranked 1 in Chaos, an esoteric programming language contest at IIT Kanpur
2012 Ranked 417 among 600,000 students in the IIT Joint Entrance Exam
2012 Ranked 455 among 1 million students in the AIEEE Exam