Saurabh Shubham

B.E. Computer Engineering

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Education

2015–2019 **Army Institute of Technology Pune**, *Computer Engineering*, *Bachelors of Engineering*.
GPA: 8.4/10

2012–2014 **Paramount Academy**, *Muzaffarpur*, *CBSE, Class XII*.
Percentage: 87.8%

2011–2012 **D.A.V. Public School**, *Muzaffarpur*, *CBSE, Class X*.
GPA: 10/10

Experience

Aug 2018 (Ongoing) **Visteon Technical And Services Center** , Computer Vision Internship, ADAS Team.
- Optimization of lane detection and classification algorithm which is to be used in LKAS (Lane Keeping Assistance System).
- Technologies used: ROS, Caffe, C++, Python.

Sep 2017 – Jan 2018 **Intel Indexer(Janta express)**, Full Stack + Data Science Internship.
- Data pipelining using PostgreSQL database with Django framework to automate data collection and data preprocessing from GDELT and Quandl.
- Built an API endpoint for Timeseries Forecasting on GDELT data.
- Realtime map visualization of events categorized on CAMEO codes using mapbox API.
- Technologies used: Django, PostgreSQL, Mapbox API, Keras.

July 2017 – Oct 2017 **Gofind.ai**, Data Science Internship.
- Extended the visual search capability from lifestyle domain to furniture domain.
- Got accuracy upto 78% for overall 24 classes of furniture.
- Technologies used: Google Cloud Platform, Tensorflow, Transfer Learning.

Projects

Aug 2017 – Oct 2017 **Real Time Bus Navigation System**, Full Stack Development.
- A system developed to gather information like bus route and bus stops between source and destination.
- Track real time position of buses around the user, filter from these buses and show the buses that are on user's entered path with the help of Google map API.
- Technologies used: Android Development, NodeJs, Firebase, Google Map API.

Feb 2018 – March 2018 **Buy-n-Earn**, Full Stack Development.
- An affiliate shopping website which offers cashbacks to users for making purchase on e-commerce websites like Amazon and Flipkart through our website.
- Website is monetized which earns through the affiliate shopping network and through advertisements displayed.
- Technologies used: NodeJs, Firebase, Affiliate Marketing, PayPal API.

Jan 2018 – March 2018 **Smart Classroom System**, Full Stack Development + Internet of Things.
- An IoT based project, aimed towards making the classroom environment smarter.
- Implemented face recognition for automatic attendance record maintenance, background detection to manage power settings and gestures to control slide transitions for presentations.
- Technologies used: RaspberryPi, NodeJs, Firebase, Google Cloud.

Jan 2018	**Recommender system**, MACHINE LEARNING.
	○ A recommendation system which recommend similar products based on title, image, brand, and color. .
	○ Google's Word2Vec model used for word embedding and VGG16 is used to extract high level features from image.
	○ Technologies used: Word2Vec, Transfer Learning.
Dec 2017	**Style Transfer**, DEEP LEARNING.
	○ This project is implementation of fast style transfer from the paper Perceptual Losses for Real-Time Style Transfer.
	○ Used Adaptive Instance Normalization technique instead of batch normalization which improve stylized image.
	○ Technologies used: Transfer Learning.
May 2018	**Caption Generator (ongoing)**, DEEP LEARNING.
	○ Involves generating captions from images as a combine application of Natural Language Processing and Computer Vision.
	○ Inspired by paper - Deep Visual-Semantic Alignments for Generating Image Descriptions
	○ Technologies used: Transfer Learning, Convolutional Neural Network, Recurrent Neural Network.

Certifications

March 2018 – May 2018	**Deeplearning.ai**, *Neural Networks and Deep Learning(99.3%), Improving Deep Neural Networks(99.2%), Structuring Machine Learning Projects(96.7%), Convolutional Neural Networks(99.5%), Sequence Models(100%)*, by Andrew Ng.
May 2018	**Deep Learning with TensorFlow**, *by IBM Cognitive Class*.

Technical Proficiency

- ○ C, C++, Python, Data Structure and Algorithms
- ○ HTML, CSS, Javascript, jQuery, Bootstrap, AngularJs
- ○ NodeJS, Django, Flask
- ○ Web Development, Android app development, Web Scraping
- ○ Internet of Things
- ○ OpenCV, Keras, Tensorflow
- ○ Google Cloud Platform, Microsoft Azure
- ○ Statistical Algorithms(Regression, Classification, Clustering)

Additional Courses

- ○ Machine Learning (Coursera)
- ○ Deeplearning.ai (Coursera)
- ○ CS 20: Tensorflow for Deep Learning Research.
- ○ CS224d: Deep Learning for Natural Language Processing by Richard Socher.
- ○ CS231n: Convolutional Neural Networks for Visual Recognition by Andrej Karpathy.