Yash Katariya

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EDUCATION

NORTH CAROLINA STATE UNIVERSITY — Expected Graduation in May 2019
MS Computer Science — GPA: 3.778 / 4
Coursework: Computer Vision, AI, Software Engineering, Statistics, Machine Learning, Algorithms

PUNE INSTITUTE OF COMPUTER TECHNOLOGY — 2013 - 2017
BEng Computer Engineering — GPA: 3.48 / 4

EXPERIENCE

E2OPEN | Data Science Intern — Pune, India | Dec 2016 – March 2017

- Analyzed time series data to forecast retail sales with multiple store multiple item combinations.
- Engineered new features by analyzing the data which improved the accuracy by approximately 7%.
- Achieved an accuracy of 89.47% using an ensemble of machine learning models for predicting the optimal price to maximize sales.

SKILLS

LANGUAGES	Python, C++, R, Java, HTML, CSS, Javascript
DATABASES	MySQL, MongoDB, SQlite3
FRAMEWORKS / TOOLS	Keras, Pytorch, Django, scikit-learn, Pandas, Jupyter Notebook, Express.js

PROJECTS

IMAGE CAPTIONING
Generates automatic captions for images using Convolutional Neural Network and LSTM. Trained the model on the Flickr8K dataset. Extracted the features of images using pretrained InceptionV3 model and used beam search to predict the captions. Achieved a loss value of 1.5987 after training for 50 epochs.

SEMANTIC IMAGE SEGMENTATION
Implementation of the 100 Layer Tiramisu paper on the camvid dataset. This dataset contains around 600 real world street images. Trained the model .for approximately 500 epochs and achieved an accuracy of 89% by segmenting the image into 32 segments like cars, humans, road, buildings. trees, etc.

DEEP CONVOLUTIONAL GAN
Implemented the DCGAN paper and trained the generator and the discriminator on the MNIST dataset. Trained the generator and the discriminator for 50 epochs generating handwritten digits.

NEURAL STYLE TRANSFER
Used VGG-16 model trained on imagenet to achieve transfer learning and calculated the content loss and the style loss to create artistic style photos. Wrote a blog post explaining the technique used to achieve style transfer and included examples of the results.

PREDICTING VISITOR ATTENDANCE IN A PARK
Built an ensemble of XGBoost and Gradient Boosting model to predict the number of visitor attendance count of the National Park. Cleaned and analyzed the data and engineered new features using the insights obtained by analyzing the data. Achieved an error rate(RMSE) of 95.59.

MACHINE LEARNING COMPETITION AWARDS

RANK 16 / 1494
Analytics Vidhya Ultimate Student Hunt Machine Learning Competition.

RANK 7 / 926
MiniHack: Machine Learning Competition held by Analytics Vidhya