

YASH KATARIYA

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EDUCATION

Master of Computer Science Expected Graduation in May 2019
North Carolina State University GPA: 3.778 / 4
Coursework: Computer Vision, Spatial and Temporal Data Mining, Machine Learning, Algorithms

Bachelor of Engineering in Computer Engineering 2013 - 2017
Pune Institute of Computer Technology GPA: 3.48 / 4

EXPERIENCE

E2open - Data Science Intern December 2016 - March 2017

- Analyzed time series data to forecast retail sales of multiple products in multiple stores.
- Engineered new features by visualizing and 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 of a product.

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 descriptions 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.

ACHIEVEMENTS

Rank 16 / 1494	Analytics Vidhya Ultimate Student Hunt Machine Learning Competition
Rank 7 / 926	MiniHack: Machine Learning Competition held by Analytics Vidhya
fast.ai	Completed Part 1 and Part 2 of the Deep Learning course taught by Jeremy Howard
cs231n Stanford Course	Completed the Convolutional Neural Networks course taught by Andrej Karpathy