

Yash Katariya

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EDUCATION

NORTH CAROLINA STATE UNIVERSITY

MS Computer Science

Coursework: Foundations of Data Science, Automated Learning and Data Analysis, Algorithms

August 2017 - May 2019

GPA: N/A

PUNE INSTITUTE OF COMPUTER TECHNOLOGY

BEng Computer Engineering

2013 - 2017

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.
- 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 | KERAS, TENSORFLOW, NUMPY, PANDAS, MATPLOTLIB, TQDM

Generates automatic captions for images using CNN 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 | KERAS, TENSORFLOW, NUMPY, MATPLOTLIB

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 | KERAS, NUMPY, MATPLOTLIB, TQDM

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.

NEURAL STYLE TRANSFER | KERAS, MATPLOTLIB, NUMPY

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 | SCIKIT-LEARN, PANDAS, MATPLOTLIB

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.

AWARDS

RANK 16 / 1494

Analytics Vidhya Ultimate Student Hunt Machine Learning Competition.

RANK 7 / 926

MiniHack: Machine Learning Competition held by Analytics Vidhya