Nikhil Verma

RP 228, BITS Pilani, Rajasthan 333031

📱 +91 99288 34365 | ✉ nikhilweee@gmail.com | 🏠 nikhilweee.me | ⓞ nikhilweee | 🔗 nikhilweee | 🐦 nikhilweee

Developer, Deep Learning Enthusiast

Skills

Keywords   Python, C++, Lua, LaTeX, HTML, Javascript, Django, Flask, AWS, Numpy, TensorFlow, Keras, PyTorch

Proficient in Python, Experienced in popular deep learning frameworks like TensorFlow, Keras, PyTorch and Numpy.
Experienced in developing web apps using Django and Flask, deploying on AWS, Azure and others.

Education

Birla Institute of Technology and Science   *Pilani, Rajasthan*

B.E. (HONS.) ELECTRICAL AND ELECTRONICS ENGINEERING   *Aug 2014 - Present*

Cummulative GPA 7.79

Experience

IBM Research   *New Delhi*

RESEARCH INTERN   *May - Jul 2017*

- Worked on improving techniques for generating answerable questions from a given source text.
- Implemented a novel approach using a syntactic sequence to sequence model to handle the problem of unknown sequences.
- Achieved improvements in automatic evaluation metrics using a much smaller vocabulary.

Bhaskaracharya Institute for Space Applications and Geo-Informatics   *Gandhinagar, Gujarat*

SUMMER INTERN   *May - Jul 2016*

- Studied classification techniques for satellite imagery to aid in identifying areas being illegally mined.
- Used techniques like K-means and Random forests and tools like QGIS, GDAL, Numpy and Scikit-Learn.
- Our project was one of the two most highest scoring ones in the final presentation among nine others.

Department of Visual Media   *Pilani, Rajasthan*

BACKEND DEVELOPER, COORDINATOR   *Aug 2014 - May 2016*

- Developed the backend for the official websites of all three major college festivals.
- Head of the department of over 40 skilled enthusiasts.
- Our systems managed over 1000 participants over the course of four days.

Projects

Autonomous Mobile Bots | V-REP, REINFORCEMENT LEARNING   *Apr 2017*

- Trained a three layer deep reinforcement learning network to steer a bot automatically given a path.
- Created OpenAI-Gym style APIs as an interface between V-Rep and Keras to facilitate training.
- Made an actual hardware implementation of the model based on Raspberry Pi.

Image Captioning | CNNS, LSTMS   *Oct 2016*

- Developed a deep learning model for generating short descriptions of images using CNNs and LSTMs.
- Implemented LSTM in Python using Numpy for CPU and Tensorflow for GPU.

Poll Predictor | CNNS, SENTIMENT ANALYSIS   *Apr 2016*

- Used CNNs to predict the US presidential elections by performing sentiment analysis on real time twitter feed.
- Implemented CNNs in Python from scratch.

Network Traffic Classifier | MLPS   *Apr 2017*

- Developed a real time system using neural networks to classify live traffic into Tor, Web, P2P and VPN Traffic.
- Used multi-layer perceptrons with specific transport layer properties as features for the model.

Registration Systems | DJANGO, AWS   *Feb 2016*

- Developed the centralised backend for the official websites of all major college fests.
- The system is used to manage registration, billing, accomodation and event participation of over 1000 participants during the fests.