

Utkarsh Ojha

<http://utkarsh2254.github.io>
 utkarsh2254@gmail.com | +91-8953566340

EDUCATION

MNNIT ALLAHABAD

B.TECH IN COMPUTER SCIENCE AND
ENGINEERING

Expected June 2018 | Uttar Pradesh,
India

Cum. GPA: 8.75

K.V. SAC VASTRAPUR

AISSCE (CLASS XII, CBSE)

Percentage 94.8

K.V. SAC VASTRAPUR

AISSCE (CLASS X, CBSE)

CGPA 10 (out of 10)

AREAS OF INTEREST

Deep learning and Representation
learning

Reinforcement learning

Computer vision

COURSEWORK

UNDERGRADUATE

Convolutional Neural Networks for Visual
Recognition (Stanford University)

Deep learning for Natural Language
Processing (Stanford University)

Machine Learning (Coursera)

Deep learning (Udacity)

Reinforcement learning (UCL)

Database Management Systems

Operating Systems

Automata Theory

Graph Theory and Combinatorics

Data Structures

SKILLS

PROGRAMMING

Python • Tensorflow • Theano • Keras
C++ • C • Java • \LaTeX

Familiar:

HTML • Javascript •

RESEARCH EXPERIENCE AND PROJECTS

DETERMINING IMPORTANT AREAS FOR IMAGE CAPTIONING

COURSE PROJECT

Dushyant Singh | Jan 2017 – April 2017 | MNNIT Allahabad

- We are investigating whether using an autoencoder/ stacked autoencoder to reduce the number of features fed into RNN module, can help in generating image descriptions at low computational cost.
- The motive behind this approach is that RNNs do take lot of computation power to train properly. And if we can somehow reduce the size of hidden state (while preserving useful features), the training time can reduce significantly.

DENOISING HIGH RESOLUTION IMAGES USING DEEP LEARNING APPROACH

RESEARCH INTERN

Ankur Grag | May 2016 – July 2014 | Indian Space Research Organisation

- The aim of the project was to come up with a machine learning approach that could perform image denoising procedure on high resolution satellite images using far less computational resources.
- We used a Deep Learning model, Stacked Autoencoders in particular to automatically learn the function that maps a noisy image to its denoised version, assuming the results of Non-local means algorithm to be the benchmark results.

ARTIFICIAL INTELLIGENCE FOR REVERSI GAME

CODEWARRIORS EVENT

Aug 2015 – Sept 2015 | MNNIT Allahabad

- Reversi is a board game played between two players. The project was about developing an artificial system that could take intelligent moves based on the current scenario of the board, in an attempt to maximize the future rewards.
- We used a combination of Minimax algorithm and dynamic programming approaches to develop the AI.

MAJOR ACHIEVEMENTS

- Attended International Conference on Machine Learning and Applications (ICMLA) held in Anaheim, California to present my research paper "Denoising high resolution multispectral images using deep learning approach".
- Certificate of excellence from Indian Space Research Organisation (ISRO) for successful completion of the research project.
- 3rd position for developing an artificial intelligence for Reversi game in CodeWarriors event held in the technical festival of MNNIT Allahabad.
- Awarded a scholarship of Rs. 5000 for academic excellence in class 12th (2nd rank with 94.8 percentage) from Kendriya Vidyalaya Sangathan, New Delhi.
- Awarded scholarship of Rs. 5000 for academic excellence in class 10th (10 CGPA) from Kendriya Vidyalaya Sangathan, New Delhi.