Utkarsh Gupta

126 PD Tandon Hostel
Motilal Nehru National Institute of Technology
Allahabad - 211004 India
☏ *9651755048, 8076566861*
✉ *utkarsh.gupta550@gmail.com*
⌂ *http://khalibartan.github.io/*

Education

2014–2018	**Bachelor of Technology** | Motilal Nehru National Institute of Technology Allahabad Information & Technology - **8.74/10 GPA**
2013–14	**Intermediate** | HAL School Korwa, Amethi CBSE board, Science stream, with Physical Education -**94%**

Experience

April 2016– August 2016	**Google Summer of Code Student** | Python Software Foundation (pgmpy) Implemented Hamiltonian Monte Carlo and No-U-Turn-Sampler (NUTS) sampling algorithm for genrating samples from continuous probablistic models. Proposed design to remove pandas as a strict dependency.
November 2015– Present	**Open Source Contributor** | pgmpy:A Python package for Probabilistic Graphical Models Wrote BIF reader, BIF writer and its test suit. Rewrote Joint Probability Distribution class and its test suit. Implemented methods related to I-equivalence. Fixed compatibility issues with python 2.7.x .

Projects

April 2015	**Pyrag Sports API** | Sports plug-in A command line tool cum web API cum browser plug-in to get latest update, etc about football and cricket. This tool was implemented as part of Hack In the North (IIIT-A) with a team of 5 people.
October 2015	**Antidote DM** | A download manger written in Python Wrote a GUI software in python that can Download files from web, and with some special features that can search and download from specific sites . Implemented as a part of Softablitz. Our team consisted of 2 people.
October 2015	**Character Classifier and Digit recognizer** | A machine learning script Implemented a character classifier using scikit-learn SVM implementation. Implemented a deeplearning 2d-convolutional neural network using keras API for digit recognition, accuracy obtained was 99.1% (on testing data-set). I was ranked 84th out of 1100+ teams (on kaggle digit recognizer, as of April 2016).

Achievements

October 2015	**Third in Softablitz** | A software development competition in Tech-fest of MNNIT Implemented the Antidote DM
October 2015	**Runner up in Logical Rhythm** | Machine learning event in Tech-fest of MNNIT Wrote a python script that classifies character in an image using support vector machine. Also wrote a python script for context based search using TF-IDF .

Skills

Competent | Python

Proficient | C, Git, Vim

Familiar | C++, Octave, Java, LaTeX

Course Work

Computer Science | Operating System, Computer Networks,Programming and Data Structures, Algorithms, Cryptography, Object Oriented modelling,Shell scripting, Computer Organization, Automata theory

Mathematics | Linear Algebra, Transform Calculus, Discrete Mathematics, Numerical Solution to Ordinary and Partial Differential Equations, Partial Differential Equations, Vector Calculus, Operations Research

Electronics | Analog and Digital electronics, Signals and System, Communication theory

Open course-ware | Introduction to Machine Learning, Heterogeneous Parallel Programming, Finding Hidden Messages in DNA