



Paarth Neekhara

Education

2013–present **B.Tech in Computer Science**, *Indian Institute of Technology Roorkee*, Roorkee, CGPA 8.53.

Experience

- May **Software Engineering Internship**, *Microsoft*, Hyderabad.
- 2016–July Worked with the Bing STCI Team and wrote a pipeline to extract Event related data from the distributed cloud database of Microsoft - COSMOS. Worked with SCOPE script for building the extraction pipeline and wrote processors and reducers in C# to analyse it.
- 2016
- May **Software Engineering Internship**, *Blue Water Trade Winds*, Dehradun.
- 2015–July Worked on full stack development of a django application for weather route optimization and monitoring of ships. My tasks involved : modelling the ship responses to weather using data from Voyage abstracts, designing a dynamic programming algorithm for weather route optimization with speed scheduling on a bounded grid in the ocean, and integration of the modules with the django application.
- 2015

Projects

- Aug 2016 **Text to Image Synthesis**,
<https://github.com/paarthneekhara/text-to-image>.
Developed a tensorflow implementation of synthesizing images from text by conditioning a generative adversarial network with skip thought vectors. I used the GAN-CLS algorithm from the paper "Generative Adversarial Text-to-Image Synthesis" (<http://arxiv.org/abs/1605.05396>) and conditioned it with uni-skip vectors.
- Aug 2016 **Visual Question Answering in tensorflow**,
<https://github.com/paarthneekhara/neural-vqa-tensorflow>.
Implemented the paper "Exploring Models and Data for Image Question Answering" (<http://arxiv.org/abs/1505.02074>) in tensorflow, to improve my understanding about linking language and vision and also get acquainted with a deep learning library.
- Oct 2015 - **RTIFeed**,
March 2016 <https://www.rtifeed.com>.
RTIFeed is a social platform to share authentic information amongst masses. Worked on the django based back-end of RTIFeed which powers both the web-based and mobile-based applications. RTIFeed stood runners up in Microsoft Code Fun Do Finalist Forum, held on a National Level in India.

December 2014 **ETherm**, *Blue Water Trade Winds*.
ETherm is a cargo temperature simulation tool. ETherm is used to predict the temperature drop of heated cargo carried on tanker ships. My task was to model the relation between temperature drop and factors affecting it such as weather conditions, Cargo Properties, Tank dimensions etc. and fit this model to the data from the cargo heating logs.

Relevant Courses

Past Courses Design and Analysis of Algorithms, Operating Systems, Software Engineering, Artificial Intelligence, Machine Learning
Additional Machine Learning - Coursera: instructed by Andrew Ng, cs231n (Convolutional
Online Neural Networks for Visual Recognition): instructed by Fei-Fei Li, Andrej Karpathy,
Courses Justin Johnson

Technical skills

Programming Languages Python, Java, C++, C, C#, JavaScript, PHP
Web Technologies HTML, CSS, JavaScript, django
Software Packages GNU Octave, Matlab, Git, MySQL
Operating Systems Linux, OSX, Windows

Extra Curricular Activities

Photography Joint Secretary Photography Section, IIT Roorkee (2015-2016)
Poetry Member of Editorial board of a literary magazine Kshitij, IIT Roorkee (2013-2014)
Interests Like cycling, table tennis and football

References

Capt. Kumaresh Gupta,
Managing Director,
Blue Water Trade Winds,
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Dr. R Balasubramanian,
Associate Professor,
IIT Roorkee,
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