# VIGHNESH BIRODKAR

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#### **EDUCATION**

#### MS in Computer Science - GPA: 3.93/4

2015 - 2017

New York University - Courant Institute, New York, USA

### B.Tech Computer Science & Engineering – GPA: 8.05/10

2010 - 2014

National Institute of Technology, Goa, India

#### WORK EXPERIENCE

#### Research Assistant, Prof. Davi Geiger

September 2016 - Current

- Action recognition in videos using Deep Neural Networks.
- Study the effects of imposing linear constraints on latent vectors through time.

### Junior Data Scientist, NYU Centre for Data Science

September 2015 - May 2016

- Implemented machine learning algorithms for scikit-learn.
- Created the project template for scikit-learn-contrib.

## Software Development Engineer, Samsung Research India

June 2014 - June 2015

- Embedded application development in Printers Division.
- Revamped the Firmware Update process.

#### Internships

### Deep Learning Intern, Butterfly Network Inc.

January 2017 - Current

• Develop deep learning algorithms for ultrasound images.

### Summer Intern, DeepMagic Inc.

June 2016 - August 2016

- Collected and augmented images.
- Designed and deployed deep networks for image recognition.

#### Google Summer of Code Student, Python Software Foundation

June 2014 - September 2014

- Designed Region Adjacency Graph Data structures from scikit-image.
- Implemented Region Adjacency Graph based segmentation algorithms.

#### Google Summer of Code Student, Simple CV

June 2013 - September 2013

- Designed a Display System for local applications in Python.
- Designed a Display System for remote applications using Python, HTML and Javascript.

## Summer Intern, IIT Bombay

May 2013 - June 2013

- Designed a Visual Programming Environment for Arduino Boards
- Ported the Visual Programming Environment for Windows, Linux and Android

#### **PROJECTS**

• Developed an Online AC Circuit Simulator for ekShiksha.

[AcionScript 3.0]

• Developed an Automatic Subtitle Finder for Movies.

[Python]

• Developed *Fredo-Editor*, a open source frequency domain image editor.

[Python]

## TECHNICAL SKILLS

## $Programming \ Languages:$

C, C++, Java, Python, Lua, Javascript, Unix Shell-Script, MySQL, ActionScript 3.0, PHP

#### Libraries

tensorflow, torch, scikit-learn, scikit-image, numpy, scipy, OpenCV, Android SDK, Flex SDK, Box2D

## Platforms and Environments:

Windows, Linux, git, Eclipse, Matlab, Clearcase, Flashbuilder, Dreamweaver