# Viterbi Internship - Random Ideas

### Arka Sadhu

# May 19, 2017

## Contents

1	Fac	e Detection	<b>2</b>
	1.1	NN for finding what the hidden layers of the Net are doing	2
	1.2	NN	2
		1.2.1 Filtering automatically with CNN	2

### 1 Face Detection

### 1.1 NN for finding what the hidden layers of the Net are doing

• Can try to analyze the hidden layers, to find which nodes are the ones which are capturing illumination invariant features and stuff like that.

#### 1.2 NN

#### 1.2.1 Filtering automatically with CNN

- $\bullet$  Can try to remove the data bias from the database, by physically removing them using another NN
- Or perhaps automatically learning that these are not exactly relevant.