

# ROHAN CHANDRA

## MACHINE LEARNING SPECIALIST

rhn.chandra@gmail.com

647-834-1636

www.rohan-chandra.com

### ABOUT ME

- I am an **applied researcher** with over two years of industrial research experience,
- I specialize in deep learning with applications to image, video and text understanding.

### SKILLS

- 7 years experience C/C++, with 3 years in a professional setting
- 2 years academic and 1 year professional experience in MATLAB, Python, Java

### AWARDS

- Mitacs Accelerate Graduate Research Internship Program
- NSERC Undergraduate Summer Research Award

### LEADERSHIP

External Liaison University of Toronto Computer Science Student Union 2009 - 2010

### INTERESTS

Video game design and development, weight lifting, and cat behavioral analysis

### WORK AUTHORIZATION

U.S and Canadian Citizenship

### EDUCATION

#### University of Toronto

2013-2016

##### Masters of Science in Applied Computing (MScAC), Dept. Computer Science

- **Joint Supervisors:** Professor Zemel and Professor Urtasun
- **Average Grade Received:** A (on an A+ scale)
- **Selected Courses:** Machine Learning, Computer Graphics, Machine Learning in Computational Biology, Computer Vision, Operating Systems Forensics & Design, Mobile & Pervasive Computing

#### University of Toronto

2007-2012

##### Honours Bachelor of Science, Dept. Computer Science

- Artificial Intelligence Specialist, Department of Computer Science
- Graduated with Distinction, 3rd and 4th year **GPA of 3.82** (on a 4.0 scale)

### EXPERIENCE

#### Vemba Corp.

May 2015 – March 2016

##### Machine Learning Researcher

- Designing deep-learning methods to determine the similarity between videos, based on their semantic content (i.e the depicted objects and concepts)
- Building convolutional neural networks (CNN) to detect salient objects in video
- Developing methods to use the hidden layer features of image-trained CNN as features in order to associate similar videos
- Implementing natural language processing methods which use learned word embeddings in order to quantify the contextual relationship between texts

#### Intel Corporation, Intel Intelligent System's Group

May 2012 – Sept 2013

##### Junior Computer Vision Researcher

- Developed Histogram of Oriented Gradients models for pedestrian recognition and tracking, as well as machine learning systems to identify demographic information, i.e. race, age, gender
- Researched novel pedestrian recognition techniques using depth camera systems to improve the detection of partially occluded pedestrians
- **Patent:** Rohan Chandra, Abhishek Ranjan, Shahzad Malik, "TECHNOLOGIES FOR INCREASING THE ACCURACY OF DEPTH CAMERA IMAGES", International Patent number: PCT/US2013/041864

#### University of Toronto

Jan 2012 – May 2012

##### Teaching Assistant, CSC320: Introduction to Visual Computing

- Responsible for supplemental lectures on image derivatives and applications, local curve analysis, edge/corner detection, Gaussian pyramids, Haar wavelets, SIFT, and Homographies
- Taught in C++ and Matlab