

# Ajjen Joshi

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## ABOUT

### PHD CANDIDATE

**BOSTON UNIVERSITY**  
expected 2018

#### Advisors:

Dr. Margrit Betke  
Dr. Stan Sclaroff

#### Research Interests:

Computer Vision  
Machine Learning  
Human Computer Interaction

## EDUCATION

**MS, BOSTON UNIVERSITY**  
**COMPUTER SCIENCE**  
2014 | Boston, MA  
GPA: 3.90/4.0

**BA, CONNECTICUT COLLEGE**  
**COMPUTER SCIENCE AND**  
**ARCHITECTURAL STUDIES**  
2012 | New London, CT  
GPA: 3.96/4.0  
Summa Cum Laude

**ST. XAVIER'S SCHOOL**  
**HIGH SCHOOL DIPLOMA**  
2007 | Kathmandu, Nepal  
Rank: 1/108

## COURSEWORK

Machine Learning  
Image and Video Computing  
Computer Graphics  
Data Mining  
Web and Mobile Computing  
Artificial Intelligence  
Self Driving Car (Udacity)

## SKILLS

### PROGRAMMING

Python • C++ • Java • Matlab  
HTML/CSS • PHP • MySQL  
Processing

### DEEP LEARNING

TensorFlow • PyTorch • Caffe

## EXTRACURRICULARS

### AJJENJOSHI.COM

Visual Creative

## SELECTED PUBLICATIONS

[1] Ajjen Joshi, S. Ghosh, S. Gunnery, L. Tickle-Degnen, S. Sclaroff, M. Betke. Context-Sensitive Prediction of Facial Expressivity using Multimodal Hierarchical Bayesian Neural Networks. IEEE International Conference on Automatic Face and Gesture Recognition (AFGR), 2018. To Appear.

[2] Ajjen Joshi, S. Ghosh, M. Betke, S. Sclaroff, H. Pfister. Personalizing Gesture Recognition Using Hierarchical Bayesian Neural Networks. IEEE Computer Vision and Pattern Recognition (CVPR), 2017. Poster

[3] Ajjen Joshi, S. Ghosh, M. Betke, H. Pfister. Hierarchical Bayesian Neural Networks for Personalized Classification. Neural Information Processing Systems (NIPS) Workshop on Bayesian Deep Learning, 2016. Poster

[4] A. Kurauchi, W. Feng, Ajjen Joshi, C. Morimoto, M. Betke. EyeSwipe: Dwell-free Text Entry Using Gaze Paths. ACM Conference on Human Factors in Computing Systems (CHI), 2016. Oral.

[5] Ajjen Joshi, C. Monnier, M. Betke, S. Sclaroff. A Random Forest Approach to Segmenting and Classifying Gestures. IEEE International Conference on Automatic Face and Gesture Recognition (AFGR), 2015. Oral.

## WORK EXPERIENCE

**ADOBE RESEARCH | RESEARCH INTERN**  
Summer 2016 | Cambridge, MA

- Explored a deep learning solution to automatically generating inbetween frames in hand-drawn 2D animation. Advised by Masha Shugrina

**DISNEY RESEARCH | RESEARCH INTERN**  
Summer 2015 | Cambridge, MA

- Implemented a prototype gesture recognition system based on glove sensor data. Advised by Dr. Hanspeter Pfister, Dr. Soumya Ghosh

**BROWN UNIVERSITY | RESEARCH INTERN**  
Summer 2011 | Providence, RI

- Created interactive multimedia installations using the Kinect. Advised by Dr. Todd Winkler

## TEACHING EXPERIENCE

**ARTIFICIAL INTELLIGENCE | BOSTON UNIVERSITY CS440**  
Senior Undergraduate Course on Artificial Intelligence | Spring 2016, 2017

**IMAGE AND VIDEO COMPUTING | BOSTON UNIVERSITY CS585**  
Graduate Level Course on Computer Vision | Fall 2014

## AWARDS

2016 NSF PETRA Doctoral Consortium Award  
2015 Boston University Outstanding Teaching Fellow  
2012 Phi Beta Kappa  
2012 Architectural Studies Award for Outstanding Senior  
2011 Connecticut College Winthrop Scholar  
2010 Recipient of Keck Research Grant