# Emma Boya Peng

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## **Education**

Stanford University

Stanford, CA

M.S. Candidate, Computer Science (AI). GPA: 4.07/4.0

Sept 2015 - Present

The University of Hong Kong

Hong Kong

B.Eng. Computer Science. GPA: 3.81/4.3

Sept 2012 - June 2015

# **Publications**

Unsupervised Learning of Long-Term Motion Dynamics for Videos

CVPR

Zelun Luo\*, Boya Peng\*, De-An Huang, Alexandre Alahi, Li Fei-Fei (\*=equal contribution)

2017

Towards Viewpoint Invariant 3D Human Pose Estimation

**ECCV** 

Albert Haque, **Boya Peng**, Zelun Luo, Alexandre Alahi, Serena Yeung, Li Fei-Fei

2016

Vision-Based Hand Hygiene Monitoring in Hospital

NIPS Workshop

Serena Yeung, Alexandre Alahi, Zelun Luo, **Boya Peng**, Albert Haque, Li Fei-Fei

2016

# **Experience**

### **Graduate Teaching Assistant**

Stanford, CA

Stanford University, CS224N: Natural Language Processing with Deep Learning.

Jan 2017 - Present

#### Research Assistant

Stanford, CA

Stanford University, Computer Vision Lab

Sept 2016 - Dec 2016

- Unsupervised Learning of Video Representations: we present an unsupervised representation learning approach that compactly encodes the motion dependencies in videos. We demonstrate the effectiveness of our learned temporal representations on activity classification across multiple modalities.

#### Software Development Intern (NLP)

Palo Alto, CA

A9.com, Product Search

June 2016 - Sept 2016

- Developed a deep sequence to sequence neural language model to generate relevant queries for Amazon products to improve matching and ranking using TensorFlow.

Research Assistant Stanford, CA

 $^{\circ}$  Stanford University, Computer Vision Lab

Oct 2015 - June 2016

- Staniord Oniversity, Computer Vision Lab
- Discriminatory Image Captioning: built an image captioning model that generates more descriptive captions by enforcing the alignments between images and generated captions while penalizing misaligned pairs.
- 3D Human Pose Estimation: proposed an approach that leverages a convolutional and recurrent network with a top-down error feedback mechanism to self-correct previous pose estimates in an end-to-end manner.

#### **Machine Learning Intern**

Shenzhen, China

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June 2015 - Aug 2015

- Developed random forest models using Spark to predict user behavior from game telemetry data.

- DeepAnnotator: built an interactive video annotation web interface using React and Flask.

- Built a game log analysis tool for data processing.

## **Honors and Awards**

- o HKMA Information Technology Management Club Scholarship 2014-2015
- o Institute of Electrical and Electronics Engineers (Hong Kong Section) Prize 2013-2014
- Undergraduate Research Fellowship Program 2014
- o HKUWW Scholarship (Exchange Studies at University of California, San Diego), 2013-2014
- o Ho Fook's Prize in Engineering 2012-2013
- o Walter Brown Memorial Prize in Mathematics 2012-2013