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**
Stanford University, Computer Vision Lab   *Oct 2015 - June 2016*

- DeepAnnotator: built an interactive video annotation web interface using React and Flask.
- 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**
Qifun Network Co   *June 2015 - Aug 2015*

- Developed random forest models using Spark to predict user behavior from game telemetry data.
- Built a game log analysis tool for data processing.

Honors and Awards

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