

WENYUAN, LI

(Seeking Machine Learning Intern in 2019 Summer)

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EDUCATION

University of California, Los Angeles, USA

Ph.D Candidate in Electrical and Computer Engineering GPA: 4.00/4.00

M.S. in Electrical Engineering (2016) GPA: 3.93/4.00

M.S. minor in Statistics

Zhejiang University, P.R.China

B.S. in Optical Engineering (2014) GPA: 3.96/4.00

SKILLS

- Machine Learning: CNN, GAN, R-CNN, SVM, XGBoost, Random forest, Logistic Regression, etc.
- Data Processing: Dimension Reduction, Pandas, OpenCV, etc.
- Programming: Python, Tensorflow, Scikit-learn, Flask, Java, C++, Matlab, etc.

RESEARCH AND WORK EXPERIENCE

IQVIA: Machine Learning Research Intern (07/18-09/18)

- Develop a semi-supervised rare disease detection framework using generative adversarial networks (GANs).
- Leverage a large amount of un-labeled data (1.5 million patient records).
- Precision-recall AUC score beats common classifier (logistic regression, neural network, and random forest) by 5%.

Medical image segmentation based on multitask learning (11/17-06/18)

- Design a two-branch deep learning “Path R-CNN” architecture based on region proposal network, and convolutional neural network.
- Model decouples the classification and segmentation task and use a simple branch to depress false positive rate.
- The new architecture boosts the segmentation performance by 7% compared to the state-of-the-art U-Net.

Collective neural dynamics: for better mental disease prediction and faster neuromorphic computing (06/15-09/17)

- Design a recurrent neural network (RNN) and emulate neural dynamics on Neuromorphic Circuits – Spikey;
- Construct a brain phase diagram for better mental disease prediction.
- Study the relationship between neural dynamics and convergence rate.

Object tracking using optical flow method (12/14-04/15)

- Track Skyrmion (a type of physics particle) in video using optical flow algorithm.
- Generate movement statistics, such as moving direction, distance, velocity, etc.

SELECTED HONORS AND AWARDS

- Electrical Engineering Department Fellowship, UCLA, 2014
- Chiang Chen Overseas Fellowship, 2014
- National Scholarship in China (top 2%), 2013
- Cross-disciplinary Scholars in Science and Technology, UCLA, 2013

CONTACT

Lab Page:

<https://www.mii.ucla.edu/people/wyli/>

Homepage:

<https://wenyuan-vincent-li.github.io/>

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<https://www.linkedin.com/in/wen-yuan-li-ucla/>

GitHub:

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