



## Huang, Li-Ya

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1992.11

### EDUCATION

2015.09-2018.03	Shanghai Jiao Tong University	M.S., Biomedical Engineering	GPA: 2.53/3.2
2011.09-2015.06	Chongqing University	B.S., Biomedical Engineering	GPA: 3.67/4 (Rank 1/54)

### RELATED EXPERIENCES

#### Nuance Communications, R&D Department NLU Group, Data Analyst Intern 2017.08-2017.10

- Used Python to extract POIs and POI categories from millions of map data, converted POIs to word vectors.
- Achieved feature selection using Information Gain method, predicted missing POI categories using Naïve Bayes Model.

#### Data Science Competition Kaggle: House Price Prediction 2017.08-2017.09

- Preprocessed data using data visualization, data cleaning, feature engineering.
- Predicted house price using model ensemble (Random Forest, GBDT, AdaBoost) and cross-validation.
- Achievement: **Root mean squared logarithmic error** on test set was **0.122**.
- Github: <https://github.com/Huangliya1125/Kaggle.git>

#### Data Analysis Using Machine Learning 2017.03-2017.08

- Used Python to realize kNN, Decision Tree, Naive Bayes and LR algorithms.
- Applied programmed algorithms on UCI machine learning public data set to test models.
- Achievement: **Precisions** on test set of all models were **above 80%**.
- Github: <https://github.com/Huangliya1125/MachineLearning.git>

#### Quantitative Study of the Influence of Swimming on Osteoporosis 2015.10-2017.09

- Project research, design and operation of the experiment.
- Used Matlab to program image processing algorithm (de-noising, segmentation, bone extraction), used finite element analysis software to quantitatively analyze results.
- Achievement: The result has been submitted to SCI journal: Journal of Synchrotron Radiation (IF: 3.0).

#### Thoracic CT Images Sorting Method Based On Similarity Measure 2014.11-2015.06

- Programed thoracic CT images sorting algorithm to classify thoracic CT images, based on the Normalized Cross Correlation similarity between thoracic CT images and reconstructed 3D models of lungs using Amira.
- Achievement: All **1440** thoracic CT images were classified and sorted correctly, a Graduation thesis was completed.

### PUBLICATIONS

Quantitative Study of the Influence of Swimming Therapy on Osteoporosis Rats Models Based on Synchrotron Radiation CT (Submitted, SCI: Journal of Synchrotron Radiation (IF: 3.0))

### SCHOLARSHIP/AWARDS

- 2015-2016 First Prize Scholarship of Shanghai Jiao Tong University (Top 30%)
- 2015 Outstanding Graduates of Chongqing University, Excellent students of Chongqing University (Top 1%)
- 2011-2014 National Endeavor Fellowship for three times (Top 0.5%), Superior Students of Chongqing University (Top 1%)

### SKILLS

**Programming Languages:** Python, SQL, Matlab, C

**English:** CET-6(480), CET-4(548), Fluent in English speaking and writing