

# LU XU

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## 🎓 EDUCATION

**Huazhong Agricultural University** 2016.09 – 2019.06

*Master* Machine Learning & Computer Vision

- 1st Prize in Annual Academic Report 2018.12
- 1st Scholar Prize 2018.10
- 1st Prize in Annual Academic Report 2017.12
- 2nd Scholar Prize 2017.10

**Hubei University of Technology** 2011.09 – 2015.06

*Bachelor* Management Information System

- Excellent Paper: «Research on Hot Topic Detection and Tracking based on Incremental Clustering» 2015.06
- Software Copyright: Hot Topic Detection & Tracking System (2015SR165186) 2015.06
- NECCS 3rd Prize 2014.04

**English: (CET-6: 575/710). Proficiency in Reading and Writing**

## 🎓 RESEARCH

**Deep Learning/Face Analysis/Machine Learning** 2017.01 – Present

- Fan, Heng, **Lu Xu**, and Jinhai Xiang. “Complementary Siamese Networks for Robust Visual Tracking.” ICASSP 2019-2019 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP). IEEE, 2019.
- **Xu, Lu**, Jinhai Xiang, and Xiaohui Yuan. “CRNet: Classification and Regression Neural Network for Facial Beauty Prediction.” Pacific Rim Conference on Multimedia. Springer, Cham, 2018.
- **Xu, Lu**, et al. “Data-driven Approach for Quality Evaluation on Knowledge Sharing Platform.” arXiv preprint arXiv:1903.00384 (2019).
- **Xu, Lu**, Jinhai Xiang, and Xiaohui Yuan. “Transferring Rich Deep Features for Facial Beauty Prediction.” arXiv preprint arXiv:1803.07253 (2018).
- **Xu, Lu**, and Yating Wang. “XCloud: Design and Implementation of AI Cloud Platform with RESTful API Service.”<sup>1</sup> Technical Report (2019).
- Hierarchical Multi-task Networks for Race, Gender, and Facial Attractiveness Recognition.
- Multi-Task Tree Convolutional Neural Network for Facial Expression Recognition and Face Analysis.
- Automatic Cyber Terror Information Classification based on Deep Learning and Random Forests. (Chinese)
- **Reviewer of Elsevier Journal <Neurocomputing>**

**Projects & Competition** 2016.09 – Present

- Plant Disease Recognition Center (PDRC): Requirement Analysis/Architecture Design/Deployment
- 1st place on Facial Expression Recognition Challenge on Real-world Affective Face Database with our proposed *TreeCNN*
- 1st place on Skin Lesion Analysis on ISIC and SD-198 datasets with our proposed *CFPNet* and *ANGELE* algorithm
- Web Data Crawling & Analysis of [www.lagou.com](http://www.lagou.com)<sup>2</sup>

## 👥 EXPERIENCE

**Blibee** 2019.02 – Present

*Algorithm Intern*

Store Intelligent Decision-making Department

- Convenience Store screen digit recognition with 99.07% accuracy
- Kanto Cooking (Display & Discard) detection and fine-grained recognition

**DiDi** 2018.09 – 2019.01

*Algorithm Intern*

Security Product & Technology

<sup>1</sup><https://github.com/lucasxlu/XCloud.git>

<sup>2</sup><https://github.com/lucasxlu/LagouJob.git>

- License image quality recognition (reflection/blur) with 93.15% Precision and 98.35% Recall
- Facial beauty prediction with 0.89 Pearson Correlation
- License type recognition with 99.77% Precision and 99.76% Recall
- Scene recognition (in car/out of car) with 99.89% Precision 99.90% Recall
- License completeness recognition with 99.80% Precision and 99.81% Recall
- Complete the writing of 21 patents related to safety products

## **GeeTest**

2018.09 – 2018.09

*Data Mining Intern*

### Behavior Verification Code Data Mining

- User behavior data analysis & mining base on Spark
- Feature extraction of black-and-white sample behavior dataset
- Complete the writing of data analysis report

## **Guangzhou Yingzi Tech**

2018.02 – 2018.03

*Deep Learning/Python Engineer*

### Animal Identification Center

- Implementation of Amazon S3 data interaction module; Cleaning and pre-processing of existing Label-Me data
- Implement and train face detection model (MTCNN), and face identification model (FaceNet) based on TensorFlow
- Encapsulate RESTful API based on Django, V1.0 achieves an accuracy over 95%

## **Beijing Jiewen Tech, Huazhong R&D Center.**

2015.06 – 2016.06

*Java/Web Spider Developer*

### Financial Information System & Multi-thread Web Crawling System

- Develop and maintain web information system based on Java SSM framework and MySQL database.
- Develop web crawlers to collect data from O2O websites (e.g. Ctrip, Dazhong Dianping, AMap) based on Python/Java and MySQL/MongoDB.
- Data statistics, analysis and visualization. It provides important data support for company offline product location

## **⚙️ SKILLS**

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- Algorithm: Deep Learning/Machine Learning/Computer Vision/Data Mining/Data Analysis
- Programming: Java == Python > R > C++
- Framework: PyTorch/TensorFlow/Scikit-Learn/OpenCV
- Database: MongoDB/MySQL/Oracle
- Others: Web Crawler/Web Development/PPT/L<sup>A</sup>T<sub>E</sub>X