

LU XU

✉ xulu0620@gmail.com · ☎ (+86) 13207145966 · 🌐 <https://github.com/lucasxlu>

🎓 EDUCATION

Huazhong Agricultural University 2016.09 – 2019.06

Master Machine Learning & Computer Vision

- Awarded as Outstanding Graduate Student 2019.05
- 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

- **Xu, Lu**, Heng Fan, and Jinhai Xiang. “Hierarchical Multi-task Networks for Race, Gender and Facial Attractiveness Recognition.” 2019 26th IEEE International Conference on Image Processing (**ICIP**). IEEE, 2019.
- Fan H, **Xu L**, Xiang J. Complementary Siamese Networks for Robust Visual Tracking[C]//ICASSP 2019-2019 IEEE International Conference on Acoustics, Speech and Signal Processing (**ICASSP**). IEEE, 2019: 2247-2251.
- **Xu, Lu**, Jinhai Xiang, and Xiaohui Yuan. “CRNet: Classification and Regression Neural Network for Facial Beauty Prediction.” Pacific Rim Conference on Multimedia (**PCM**). Springer, Cham, 2018.
- **Xu, Lu**, Jinhai Xiang, and Xiaohui Yuan. “Learning Beauty by Transferring Rich Deep Features.” **Concurrency and Computation: Practice and Experience** (Accepted).
- **Xu, Lu**, et al. “Data-driven Approach for Quality Evaluation on Knowledge Sharing Platform.” 2019 International Conference on Machine Learning and Cybernetics (**ICMLC**). IEEE, 2019.
- **Xu, Lu**, et al. “XCloud: Design and Implementation of AI Cloud Platform with RESTful API Service.” ¹ Technical Report (2019).
- Multi-Task Tree Convolutional Neural Network for Facial Expression Recognition.
- Research on Online Skin Disease Diagnosis and Recognition based on Deep Learning. (MS Thesis, in Chinese)
- Automatic Cyber Terror Information Classification based on Deep Learning and Random Forests. (in 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-word 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 Lagou ²

👥 EXPERIENCE

Blibee 2019.02 – Present

Vision Algorithm Engineer

Store Intelligent Decision-making Department

- Convenience Store screen digit recognition with 99.07% accuracy
- Image quality assessment model with 94.34% Top1 accuracy
- Kanto Cooking (Display) detection with 0.898 AP, and fine-grained recognition with 85.42% accuracy
- Kanto Cooking (Discard) detection with 0.950 AP, and fine-grained recognition with 95.23% accuracy

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

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

- Daily fresh meal detection with 0.920 AP and 98.17% accuracy
- Air curtain & laminate detection with 0.905 mAP

DiDi

2018.09 – 2019.01

Algorithm Intern

Security Product & Technology

- 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

- 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^AT_EX