

Lu Xu

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OBJECTIVE Machine Learning/Computer Vision Algorithm Engineer.

EDUCATION *Huazhong Agricultural University* **2016.09–2019.06**
Master of Science Machine Learning & Computer Vision

- 1st Scholar Prize in 2018.
- 1st Prize on *Academic Research Report* (outperform all Ph.Ds), “Combining Machine Learning and data-driven Approaches for AI Services”.
- 2nd Scholar Prize in 2017.

Hubei University of Technology **2011.09–2015.06**
Bachelor of Management Information Management & Information System
Concentration: Text Mining & Machine Learning

- My undergraduate thesis *Research on Hot Topic Detection and Tracking based on Incremental Clustering* was awarded as *excellent paper* among all papers of Hubei province in 2015.
- My *Hot Topic Discovery System* was authorized (2015SR165186) in 2015.
- 3rd Prize in NECCS (national level) in 2014.

RESEARCH *Face Analysis & Deep Learning* **2017.09–now**

Academic Papers

- Hierarchical Multi-task Networks for Race, Gender and Facial Attractiveness Recognition (submitted to ICASSP 2019).
- Multi-Task Tree Convolutional Neural Network for Facial Expression Recognition and Face Analysis (submitted to ICASSP 2019)
- CRNet: Classification and Regression Neural Networks for Facial Beauty Prediction (PCM 2018. CCF C).
- Transferring Rich Deep Features for Facial Beauty Prediction (Computers & Electrical Engineering. SCI).
- Data-driven Approach for Quality Evaluation on Knowledge Sharing Platform.
- An Automatic Method for Internet Terror Information Classification based on Deep Learning and Random Forests (Chinese)

XCloud **2016.12–2017.09**

I develop an AI Cloud Platform named *XCloud*, which provides AI and data services for both business companies and academic organizations. The APIs have been called for over than 180,000 times till now.

Features

- CV: Face Comparision, Facial Beauty Prediction, Facial Expression Recognition, Age Estimation, Gender Recognition.
- NLP: Sentiment Analysis, News Classification and Hot Keywords Extraction.
- Data Services: Web Crawling, Data Analysis, and Data Visualization (HTML5).

EXPERIENCE

DiDiChuXing: Deep Learning Algorithm Engineer

2018.09–now

During my intern at *DiDiChuXing*, we are working at developing deep learning models for *Image Quality Assessment (IQA)*, *License Type Classification* and *Facial Beauty Prediction*.

- Building deep models for IQA with 97% precision and 99% recall.
- Developing and training deep models for license type classification with 99% accuracy.
- Developing deep models for Facial Beauty Prediction with 0.92 PC.

Deep Learning/Python Engineer

2018.02–2018.03

We develop an *Pig Face Recognition System* with *Guangzhou Yingzi Technology Incorporation*, the system provide *face detection*, *face comparison* with *RESTful APIs* based on TensorFlow and Django. The *Pig Face Recognition System* achieves a mAP with approximate 95%.

- Building deep models (MTCNN + FaceNet) and training on Amazon S3 server.
- Encapsulate RESTful APIs and web backend development based on Django and MySQL.

Machine Learning Algorithm Engineer

2017.07–2017.09

I developed an *Mal-Image Recognition System* with *Wuhan ZhiLiFeng Information Incorporation*, the model achieves a mAP with 92.17% on detecting mal-images.

- Image data crawling and preprocessing.
- Building machine learning algorithms.
- Model training and deployment.

Web Crawling and Java Developer

2015.06–2016.06

During working at *Beijing Jiewen Technology Co.,Ltd.*, *Huazhong Developing Center*. My duties are developing and maintaining *Financial Information System*, and developing *Web Crawling System* based on Java and Python. The *Web Crawling System* has crawled million-level datasets from Internet.

- Developing and maintaining web information system based on Java SSM framework and MySQL database.
- Developing web crawlers to collect data from O2O websites (e.g. Ctrip, Dazhong Dianping, AMap), and storing them in MySQL and MongoDB.
- Data statistics, analysis and visualization based on HTML5.

SKILLS

Programming: Java == Python > R >= C ++

Algorithm: Deep Learning/Machine Learning/Computer Vision/Data Mining/Data Analysis

Framework: PyTorch/TensorFlow/Scikit-Learn/OpenCV

Database: MongoDB/MySQL/Oracle

English: CET-6 (575/710); Proficiency in reading and writing.

Platform: Linux, Windows.

Others: Web Crawler/Web Development/PPT

INTERESTS

Coding, Reading (Technology, Internet and Business), Photographing, Writing (Data Analysis Report), Design (PPT, UI)

I like solving real-life problems using data-driven methods.