

MiaoDX

缪东旭

Graduate Student,  
Self-motivated Developer



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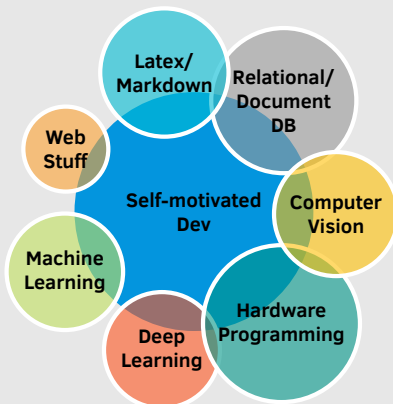
<https://github.com/MiaoDX>



<https://miaodx.github.io/>

## Skills

### Overview



### Programming

0 LOC —————> 5000 LOC

OpenCV • Python • Markdown

C++ • C • Arduino

Java • JS • HTML

## Experience

### TJU RM Member

CV, DL methods on object detection, tracking and decision making.

### Teaching Assistant

Programming Design Practice I, full English course for freshmen.

### Teaching Python101

Teaching python for several overseas master candidates major in finance.

### Volunteer Teacher

Volunteered to teach in a primary school in TongChuan, Shannxi, organized by "Dripping Action" (one project of Mutualistic Symbiosis Community of Youths & Environment, Shaanxi).

## Education

2016 - Now **MSe., Computer Software**  
2012 - 2016 **BEng., Computer Software**

Tianjin University  
Xidian University

## Scholarships & Awards

2017-2018 **Second-class School Scholarship**  
2016-2017 **First-class School Scholarship**  
Oct 2016 **Postgraduate recommendation offer from Tianjin University**  
2014-2015 **National Inspiration Scholarship**  
2014CUMCM **Second-class prize in Shaanxi Division**  
2013-2014 **Second-class School Scholarship**  
2012-2013 **First-class School Scholarship**

## Papers

Jan 2018 **Paper Accpeted by ICASSP 2018**  
ACTIVE CAMERA RELOCALIZATION WITH RGBD CAMERA FROM A SINGLE 2D IMAGE (Camera ready, First Author)  
Mar 2018 **Paper Accpeted by ICME 2018**  
Fast and Reliable Computational Rephotography on Mobile Device (Camera ready, Oral, Third Author)

## Projects

Recent projects, more can be found on github [github.com/MiaoDX](https://github.com/MiaoDX)

Jan 2018 - **ICRA 2018 DJI ROBOMASTER AI CHALLENGE**  
Present Preparing for ICRA 2018 DJI RM AI CHALLENGE with other five teammates from TJU. In charge of object detection and tracking.

Mar 2016 - **Active Camera Relocalization**  
Present Actively relocate camera to previous pose is one fundamental research area in robotics and computer vision. Major part of my undergraduate graduation and conference papers.

Python **Data Labelling tool for ML/DL** DataLabel  
Data Label Data labelling tool to make the work less tedious with tracking methods underneath. Export file for DLIB and Darkflow.

Virtual Env **UnrealCV with Deep Learning (Faster-RCNN)** UnrealCV & DL  
DL Integrate (smallcorgi/Faster-RCNN\_TF) with virtual environment library UnrealCV. Exploring the potential benefits of synthetic data on improving exisiting DL implements.

Python **PacMan capture the flag with Reinforcement Learning** PacMan & RL  
RL Some reinforcement projects on pacman capture the flag game, with fundamental concepts and a contest hold in class.

OpenCV **Restful depth camera** Depth\_camera & http  
Flask Expose one stereo camera (ZED) into restful one, so that it can be accessed from other programming languages with ease.

Python **UCI Adult database processing with scikit-learn** scikit\_learning  
ML Use sklearn to predict whether income exceeds \$50K/yr based on census data, got best result in class (85%+ precision).

Java **Back propagation implementation using java** BP\_java  
BP It helped a lot to understand DL by implementing one simple ANN from scratch before diving into those amazing open source ML(DL) libraries.

Node.js **Attendance management system** Attendance system  
MongoDB In a team of four, made an RESTful attendace webset system with Node.js, mongodb and Jade for a (faked) company. Stuffs can ask for leave via our system and wait for the managers's approval, statistical information can also be generated from our system.