LIU XIAO

Phone: (+852) 60454902

Email: dlutliuxiao@sina.com

Education

MSc student, Electronic Engineering, Chinese University of Hong Kong. GPA 85.5/100

Bachelor, Automation, Dalian University of Technology. GPA 3.5/4.0

Research Experience

Person Re-identification with Deep Neural Networks, CUHK

Video-based Person Reid task

- Built several models to extract features of video sequence and implement the classification of person id.
- Two Attention mechanisms (self-attention and co-attention) are adopted.

Image-based Person Reid task

- Partial Person Re-identification
- Re-implement a VPM model to extract region-level features and compare two images.

Kinship verification

- VGG model and triplet loss have been proposed

Additional Experience

The module of Building and Deploying Scalable ML Services

- Built several online-based ML applications.
- Several chat bots have been trained and deployed to classify images and recommend new movies.
- Django and Flask have been used to build servers.
- Messages Queues and Asynchronous techniques are applied on communications between clients, servers and applications.

The module of Image Processing and Computer Vision

- The 3D reconstruction of a dinosaur model is assigned with the stereo algorithm

Campus Activities

Humanoid Robot Laboratory of DUT.

Participated in the RoboCup Standard Platform League in HeiFei, China

- Developed strategies and algorithms to make the NAO robots complete competition tasks (python programming).
- Added communication modules to the robots (python socket programming).
- Completed the communication modules between the robots and the referee box (python TCP and HTTP programming).

Internship Experience

Web back-end developer, Institute of Acoustics Chinese Academy of Sciences.

Topic: Media Asset Management System.

- Responsible for preparing the foundation of web projects by coding specific Java data objects, Java source files, XML files and SQL statements designed for graphical presentation, data manipulation and security.
- Developed a dynamic member login application and web portal using Java Struts 2.0 framework.

Selected Modules of Master Degree

- Deep Learning
- Machine Learning
- Building and Deploying Scalable ML Services
- Image Processing and Computer Vision

Awards & Honors

- The First Prize for the College Mathematics Competition, Dalian City
- The Second Prize for the National Mathematics Competition and the First Prize in Liaoning Province
- The Honorable Mention for MCM/ICM
- The Silver Medal for 1st Aldebaran Robotics Online Programming Competition
- Champion for RoboCup Standard Platform League(NAO) 2VS2 and second prize for Technical Challenges, in HeFei, China
- Two times Second-Class Scholarship (5%-20%), Three times Science and Technology Innovation Scholarship (4%)
- Outstanding Graduate student

Programming Languages and Skills

- Python, JAVA, C#
- MATLAB, LATEX
- Linux shell, vim

Deep Learning and Machine Learning Frameworks

- Pytorch programming
- Scikit-learn

Language Skill

- **IELTS** : 7.0 (subsection: 6.5)