Linsen Dong

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EDUCATION

Bachelor of Engineering in Measurement and control technology and instrumentation, School of Automation and Engineering 08/2014 present University of Electronic Science and Technology of China(UESTC), Sichuan, China GPA: 3.45 /4.0, Weighted Average Mark: 81.66/100

RESEARCH INTERESTS

- · Machine Learning, especially Deep Reinforcement Learning
- Multi-Agent System
- Autonomous System

PROJECT AND RESEARCH EXPERIENCES

Mars (Multi-Agent and Robotic System Lab of UESTC) 08/2015 07/2017

- 1. Mobility Load Balancing Algorithm in Basestation based on LSTM
 - Built a LSTM(Long-Short Term Memory) network to predict users' moving policy under some certain scenarios (subway station, office building, etc.) for solving the MLB problem in basestation
 - Achieved 90% accuracy for predicting basestation that users will connect to next
 - Firstly incorporated Deep Learning method to solve the basestation control problem
 - Project website: https://github.com/Lukeeeeee/MLB-LSTM
- 2. Multi-Agent Control System based on DDPG and Fuzzy Logic Control System
 - Built a novel platform that implement DDPG (Deep Deterministic Policy Gradient) controller and fuzzy logic rule controller
 - Pre-trained the DDPG controller by learning the policy of fuzzy logic rule controller
 - Firstly incorporated human knowledge to DDPG by using fuzzy logic rule system
 - Project website: https://github.com/Lukeeeeee/DRLFramework
- 3. Multi-UAV Path Planning System based on Colony Algorithm
 - Built a distributed multi-UAV path planning system
 - Inspired by the concept "pheromone" in swarm intelligence and invented a method to computed the pheromone between every agent

MII (Machine Intelligence Institute of UESTC) 07/2017 present

- 1. An End to End Autonomous Driving System based on LSTM and DDPG
 - Built an end-to-end autonomous driving control system based on torcs game using camera's temporal image data as input, controlled the car's wheel, brake, etc.

- With pre-training method, the controller obtained a well policy already before doing reinforcement learning
- Firstly used temporal data and built a RNN(Recurrent Neural Network) model to solve automation driving problem
- Project website: https://github.com/Lukeeeeee/AlphaDriver

DCML (Distributed and Mobile Computing Lab of UESTC) 06/2017 09/2017

- 1. A Multi-Discriminator Generative Adversarial Networks (GAN)
 - Built a multi-D GAN model using multi-dataset to generate a mixture of different styles and features
 - Firstly applied GAN to multi-dataset and multi-discriminator
 - Project website: https://github.com/Lukeeeeee/DC-GAN

SysLab (A Web Development Studio of UESTC) 12/2014 10/2015

- 1. A website project for Journal of UESTC
 - Implemented the website back-end using PHP with MVC design pattern and database management using MySQL
 - As project leader, coordinated the development task within group and scheduled the progress
 of the project

AWARDS AND HONORS

- 1. Bronze Medal The ACM-ICPC Asia Regional Contest Xi'an Site 2014
 - Rank 36/505
- 2. First Prize in High Performance Computing Competition of UESTC hosted by NVIDIA and OMNISKY 2016
 - Built a novel parallel CCL (Connected-component labeling) algorithm based on CUDA platform running at NVIDIA graphic card
 - Achieved 5x speed up comparing to normal CPU algorithm
 - Project website: https://github.com/Lukeeeeee/CCL

SKILLS

- Programming Language: C, C++, Python
- Machine Learning: Tensorflow, CUDA, Caffe
- Standardized Test of English:
 - TOEFL 101(Reading 28, Listening 27, Speaking 24, Writing 22)
 - GRE 324(Verbal 154, Quantitative 170) + AW 3.0