LIANG NIU

New York University Abu Dhabi, Abu Dhabi, UAE
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EDUCATION

Ph.D. Student of Computer Science September 2017 - Now
Tandon School of Engineering, Brooklyn, NY Advised by Christina Pöepper
New York University

Master Degree in Computer Science September 2015 - May 2017
Tandon School of Engineering, Brooklyn, NY
New York University, GPA: 3.78/4.00

Double Degree in Information Security and Law September 2011 - July 2015
College of Computer and Control Engineering, Tianjin, China
Nankai University, GPA: 82.3/100.0

SKILLS

Tech Skills	Python, C/C++, Machine Learning, Computer Vision, Database, Web Back-End Developing
Platforms	Linux, TensorFlow, PyTorch
Languages	Mandarin, English

WORK EXPERIENCE

Teaching Assistance for Machine Learning, NYU Tandon CSE September 2016 - May 2017
On Campus Job *Brooklyn, NY*

· Grading homeworks and projects, holding office hours, answering students questions and so on.

Database and PHP Engineer January 2014 - May 2014
Part-time *Tianjin, China*

· Design, create, and maintain MySQL database for whole project. Designed the architecture for the website.
· Implement search module and social network module using PHP and ThinkPHP Framework. Also support other teams.

RESEARCHES, PROJECTS AND PUBLICATIONS

GPS Spoofing Detection Fall 2018 - Now
Ongoing Research

· Design a novel method to detect GPS spoofing attacks.

3D Deep Dense Descriptor for Volumetric Shapes with Adversarial Networks Fall 2017
arxiv.org preprint

· A new definition of 2D multilayer dense representation (MDR) of 3D volumetric data.
· Jointly train a set of convolution neural network (CNN), recurrent neural network (RNN) and an adversarial discriminator to extract concise but geometrically informative shape description from 3D volumetric data.

A Wearable Assistive Technology for the Visually Impaired with Door Knob Detection and Real-Time Feedback for Hand-to-Handle Manipulation Spring 2017 - Summer 2017
ACVR Workshop Paper of ICCV 2017

· A new dataset for door handles and door knobs.
· Leveraging stereo camera and deep neural network to help the visually impaired with opening the door.
· Combine Door Knob Detection with Joy Stick Control feedback to the visually impaired to fetch the door handle.