

Zhijie Wang

Education

- 09/2015 - 07/2019 **Beijing University of Posts and Telecommunications**, Beijing, China.
B.E. Telecommunication Engineering, GPA:85.71/100.0
- 09/2012 - 06/2015 **Fuzhou No.1 Middle School**, Fuzhou, China.

Experience

- 11/2018 - Present **Megvii Technology Ltd., Megvii Research**, Beijing, CN.
Research Intern at SLAM Group.
Mentor: Dr. Jian Sun & Mr. Xiao Liu
- Researched on re-localization in Visual-Inertial Odometry System with multi-sensors fusion. (Final Year Project)
 - Developed a simulator for testing MegviiAres Robot with laser and visual sensors based on Gazebo.
 - Developed a laser-odometer calibration tool based on Canonical Scan Match and Maximum-likelihood with C++.
- 07/2018 - 09/2018 **National University of Singapore, Dept. of ECE**, Singapore, SG.
Non-graduating Research Student at Unmanned System Research Group.
Supervisors: Prof. Ben M. Chen & Dr. Lin Feng
- Researched on continuous localization and mapping in low-light environments based on multi-sensors fusion. Resulted in an ICCA 2019 paper (Submitted).
<https://github.com/paulwong16/TVO-GridMap>
 - Researched on image enhancement for underwater tasks based on conditional Generative Adversarial Networks. Resulted in an ICRA 2019 paper (Under Review).
<https://github.com/Xiaodong-Bran/underwater-image-enhancer>
- 09/2017 - 06/2018 **Tsinghua University, Dept. of EE**, Beijing, CN.
Research Intern at iVip Group.
Supervisor: Prof. Fei Qiao
- Researched on Visual Semantic SLAM based on ORB-SLAM2 and SegNet. Resulted in a CN Patent.
 - Participated in ROS programming for SLAM system test and evaluation.
- 03/2018 - 06/2018 **Beijing Univ. of Posts & Telecommunications, School of ICE**, Beijing, CN.
Curriculum Design at Future Network Lab.
Supervisor: Prof. Haipeng Yao
- Implemented a virtual network embedding algorithm with MATLAB.
<https://github.com/paulwong16/Virtual-Network-Embedding>
- 12/2017 - 02/2018 **Beijing Univ. of Posts & Telecommunications, School of ICE**, Beijing, CN.
Curriculum Project at Wireless Signal Processing & Network Lab.
Supervisor: Prof. Hang long
- Designed a 16QAM based on a star-like constellation diagram. Implemented with MATLAB.
<https://github.com/paulwong16/Star-16QAM>

Publications

- Conference Papers
- Zelei Cheng, **Zhijie Wang**, Feng Zheng, **Cloud Computing Security**, *2018 International Conference on Information Technology (ICIT 2018)*. Presented.
 - Xiaodong Liu, **Zhijie Wang**, Yu Heng Tan, Yingcai Bi, Ben M. Chen, **Underwater Image Enhancer based on Conditional GANs**, *IEEE International Conference on Robotics and Automation 2019 (ICRA 2019)*. Under Review.
 - **Zhijie Wang***, Yingcai Bi*, Ben M. Chen, **Continuous Localization and Mapping for Autonomous Navigation in Low-light Environments based on Multi-sensors Fusion**, *IEEE International Conference on Control and Automation 2019 (ICCA 2019)*. Under Review.

Patents ○ Xinjun Liu, Chao Yu, Fei Qiao, Fugui Xie, **Zhijie Wang**, **A Robot SLAM System towards Dynamic Environments**, *CN Patent Application No. CN108596974A*. Published.

Relevant Coursework

Beijing Univ. of Posts & Telecommunications

Computer Science	The Fundamentals of Computer (90/100), Data Structures (90/100), Programming Practices (93/100), Database Technology and Application (92/100), Fundamentals of Information Theory (94/100), Computer Communication and Networks (90/100), Software Defined Networking (94/100)
Electrical Engineering	Fundamentals of Circuit Analysis (90/100), Electronic and Circuit Foundation (92/100), Introduction to Communication Engineering (95/100), Digital Signal Processing (91/100), Principles of Communications I (90/100), RF and Microwave Technology (96/100)
Mathematics	Linear Algebra (93/100), Probability Theory and Mathematical Statistics (92/100)

Technical Experience

Extremely Proficient With

Languages	C++, Python, MATLAB
Softwares	ROS, OpenCV, Eigen, Ceres-Solver, Tensorflow, L ^A T _E X, Git, Windows, Ubuntu

Have Experience With

Languages	Virelog, VHDL, SQL
Softwares	AutoCAD, Multisim, ONOS, Quartus, SQL Server

Language Proficiency

English	IELTS: 7 Reading: 7.5, Listening: 7.5, Speaking: 6, Writing: 6 (Jan 2019)
Chinese	Mandarian Native Speaker Hokkien Native Speaker

Honors

Scholarships	3 times 3rd Prize Scholarship of Beijing University of Posts and Telecommunications (2016 & 2017 & 2018)
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Activities

06/2015 - Present	RAiNBOW Project , Crew Member. Published 3 Original Chinese albums and held more than 20 concerts in China together with my high school friends. Major work is video clipping.
09/2015 - 05/2018	Football team of SICE , Captain. 1st Prize in Principle Cup (2016), twice 3rd Prize (2017 & 2018)