

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.

Experiences & Projects

- 11/2018 - Present **Megvii Technology Ltd.**, *Megvii Research*, Beijing, CN.
Research Intern at SLAM Group.
Mentor: Dr. Jian Sun & Mr. Xiao Liu
- Researched on Motion-prior Visual-Inertial Odometry. (Final Year Project)
 - Implemented a laser-odometer calibration tool based on Canonical Scan Match and Maximum-likelihood with C++.
<https://github.com/MegviiRobot/OdomLaserCalibraTool>
 - Developed a simulator for testing MegviiAres Robot with laser and visual sensors based on Gazebo.
- 07/2018 - 09/2018 **National University of Singapore**, *Dept. of ECE*, Singapore, SG.
Non-graduating Research Student at Unmanned System Research Group.
Superviosr: Prof. Ben M. Chen & Dr. Lin Feng
- Researched on continuous localization and mapping in low-light environments based on multi-sensors fusion. Resulted in a paper submitted to ICCA 2019.
<https://github.com/paulwong16/TVO-GridMap>
 - Researched on image enhancement for underwater tasks based on conditional Generative Adversarial Networks. Resulted in a paper submitted to Instrumentation.
<https://github.com/Xiaodong-Bran/underwater-image-enhancer>
- 09/2017 - 06/2018 **Tsinghua University**, *Dept. of EE*, Beijing, CN.
Research Intern at iVip Group.
Superviosr: 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.
Superviosr: 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 Confernece on Information Technology (ICIT 2018)*. Presented.
 - **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.

Journal Papers ○ Xiaodong Liu, **Zhijie Wang**, Yu Heng Tan, Yingcai Bi, Ben M. Chen, **Underwater Image Enhancer based on Conditional GANs, *Instrumentation***. Submitted.

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, \LaTeX , 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)

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)