# KEJIE LI

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### **EDUCATION**

# Doctor of Philosophy

2017 - 2021

University of Adelaide, Australia

· PhD thesis: Object-centric Mapping

# Bahelor of Advanced Computing (Honours)

2014 - 2016

the Australian National University, Australia

- · First Class Honours
- · Thesis: Improved CNN Regression Model for Depth Estimation from a Single Image

# Bahelor of Computer Science

2012 - 2014

Shandong University, China

· Averge Grade 91%

#### WORK EXPERIENCE

### Postdoctoral Researchere

2021 - Present

the University of Oxford

I am working on high-quality 3D reconstruction using RGBD camera under the supervision of Prof. Philip Torr and Prof. Victor Adrian Prisacariu.

### **External Research Collabarator**

2020 - 2021

Facebook Reality Lab Research

The research project, ODAM: Object Detection, Association, and Mapping using Posed RGB Video, is accepted in ICCV 2021 with an oral presentation (acceptance rate: 3%)

Research Intern 2019 - 2020

Facebook Reality Lab Research

This internship led to a publication called "FroDO: From Detections to 3D Objects" appeared in CVPR 2020.

# Teaching Assistant

February 2019 - July 2019

University of Adelaide

Tutoring for Foundation of Copmuter Science (FCS). I was responsible for teaching Object Oriented Programming and demonstrating programming in small groups.

# Teaching Assistant

July 2016 - Octobor 2016

the Austrlian National University

Tutoring for COMP6730: Programming for Scientists, a python programming course for students from various disciplines.

the Austrian National University and Data61

A learning based data structure to store DNA sequence more efficiently where we applied autoencoder to help biologists analyzing the information of DNA.

### **AWARDS**

- University of Adelaide International Wildcard Scholarship, University of Adelaide, 2017-2019
- Adelaide Graduate Research Scholarship, University of Adelaide, 2019-2020
- Australian Centre for Robotic Vision (ACRV) Top-up Scholarship, ACRV, 2018-2020
- International University Partnership Scholarship, ANU, 2014
- First Class National Scholarship, China, 2014
- First Class National Scholarship, China, 2013

## **PUBLICATION**

citations: 475, h-index: 5, Link to Google Scholar

- **Kejie Li**, Daniel DeTone, Steven Chen, Minh Vo, Ian Reid, Hamid Rezatofighi, Chris Sweeney, Julian Straub, Richard Newcombe, "ODAM: Object Detection, Association, and Mapping using Posed RGB Video", ICCV 2021 (oral)
- Kejie Li, Hamid Rezatofighi, Ian Reid, "MOLTR: Multiple Object Localization, Tracking and Reconstruction From Monocular RGB Videos", IEEE Robotics and Automation Letters, 2021
- **Kejie Li\***, Martin Rünz\*, Meng Tang, Lingni Ma, Chen Kong, Tanner Schmidt, Ian Reid, Lourdes Agapito, Julian Straub, Steven Lovegrove, Richard Newcombe, "FroDO: From Detections to 3D Objects", CVPR 2020
- Kejie Li, Ravi Garg, Ming Cai, Ian Reid, "Optimizable Object Reconstruction from a Single View", BMVC 2019 (oral)
- Mehdi Hosseinzadeh, Kejie Li, Yasir Latif, Ian Reid, "Real-time Monocular Object-model Aware Sparse SLAM", ICRA 2019
- Kejie Li, Trung Pham, Huangying Zhan, Ian Reid, "Efficient Dense Point Cloud Object Reconstruction using Deformation Vector Fields", ECCV 2018
- Huangying Zhan, Ravi Garg, Chamara Saroj Weerasekera, Kejie Li, Harsh Agarwal, Ian Reid, "Unsupervised Learning of Monocular Depth Estimation and Visual Odometry with Deep Feature Reconstruction", CVPR 2018

### **PROGRAMMING**

• Python, C++, Pytorch, Tensorflow

#### PROFESSIONAL SERVICES

- Conference reviewer: CVPR (2019, 2020, 2021), ECCV (2020), ICCV (2019, 2021), ICRA (2019), IROS (2020), WACV (2020)
- Journal reviewer: RA-L, RSS

#### REFERENCES

# Prof. Ian Reid

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# Dr. Julian Straub

Facebook Reality Lab Email - jstraub@fb.com Phone +1~617~922~5862