Xiaohan Fei

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EDUCATION University of California, Los Angeles

Fall 2014-present

Ph.D. in Computer Science Supervisor: Prof. Stefano Soatto

Research Group: UCLA Vision Lab (http://vision.ucla.edu)

GPA: 3.88/4.0

ZHEJIANG UNIVERSITY

Fall 2010-Spring 2014

B.Eng. in Information and Communication Engineering

Major: Information and Communication Engineering

Minor: Advanced honor Class of Engineering Education (ACEE), Chu-Kechen College

GPA: 3.98/4.0(92.35/100)

Title of Undergraduate Thesis: Wide-baseline feature matching for panoramic images

Undergraduate Thesis Supervisor: Prof. Zhiyu Xiang

Research

NVIDIA RESEARCH, SANTA CLARA, CALIFORNIA

Summer 2018

EXPERIENCE Research Intern

Worked on unsupervised learning of structural representation for 3D objects.

META COMPANY, SAN MATEO, CALIFORNIA

Summer 2017

Research Intern

Developed a tightly-coupled visual-inertial SLAM algorithm for Augmented Reality.

University of California, Los Angeles

Fall 2014-present

Graduate Student Researcher

Conducting research activities under the supervision of Prof. S. Soatto. Main projects include: image based re-localization, visual-inertial sensor fusion and object-level (semantic) mapping.

AWARDS &

2019: Finalist of ICRA Best Paper Award in Robot Vision.

DISTINCTIONS 2013: Meritorious Winner of Mathematical Contest in Modeling (top 15% of 6000 teams worldwide)

2012: National Scholorship (highest hornor for undergraduates in China)

Publications [1] X. Fei, A. Wong, and S. Soatto. Geo-Supervised Visual Depth Prediction. In International Conference on Robotics and Automation (ICRA), 2019. (best robot vision paper finalist) Also in IEEE Robotics and Automation Letters (RA-L).

> [2] X. Fei, S. Soatto. Visual-Inertial Object Detection and Mapping. In European Conference on Computer Vision (ECCV), 2018.

> [3] J. Dong*, X. Fei*, and S. Soatto. Visual-Inertial-Semantic Scene Representation for Object Detection. In Computer Vision and Pattern Recognition (CVPR), 2017.

> [4] X. Fei, K. Tsotsos, and S. Soatto. A Simple Hierarchical Pooling Data Structure for Loop Closure. In European Conference on Computer Vision (ECCV), 2016.

Professional Reviewer of

Services International Conference on Intelligent Robots (IROS) 2019

International Conference on Computer Vision (ICCV) 2017 & 2019

International Journal of Medical Robotics and Computer Assisted Surgery (IJMRCAS)

Talks &

Inertial-aided Visual Perception for Localization, Mapping, and Detection, at Magic Leap, 2019.

Workshops Visual-Inertial-Semantic Scene Representation, at Bridges to 3D Workshop, CVPR 2017.

Teaching CS M152A Introductory Digital Design Laboratory, Spring 2018.

Relevant

University of California, Los Angeles: Machine Perception (Prof. S. Soatto), Convex Op-COURSEWORK timization (Prof. L. Vandenberghe), Calculus of Variations (Prof. L. Vese), Vision as Bayesian Inference (Prof. A. Yuille), Applied Probability (Prof. Y. Wu), Theoretical Statistics (Prof. A. Amini), Numerical Analysis (Prof. J. Teran), Machine Learning Algorithm (Prof. M. Sarrafzadeh) Zhejiang University: Computer Vision (Pof. Z. Xiang), Spectral Analysis of Signals (Prof. X. Gong), Information Theory (Prof. Z. Zhang), Mathematical Modeling (Prof. Q. Yang)