

# 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>)
- 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 EXPERIENCE 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: visual place recognition, fast image based re-localization and visual-inertial sensor fusion for navigation, semantic mapping & object detection.
- ZHEJIANG UNIVERSITY, CHINA Fall 2013-Spring 2014  
**Undergraduate Thesis**  
Developed a Structure from Motion system for panoramic images under the supervision of Prof. Zhiyu Xiang. Scale, orientation and planar motion constraints are explored to improve wide-baseline feature matching.
- UNIVERSITY OF CALIFORNIA, LOS ANGELES Summer 2013  
**Research Intern**  
Developed a visual recognition system on Samsung Galaxy 4 based on multi-view descriptor aggregation. Investigated ways to handle nuisance variability in feature matching and object recognition.
- AWARDS & DISTINCTIONS **2013:** Meritorious Winner of Mathematical Contest in Modeling (top 15% of 6000 teams worldwide)  
**2012:** National Scholarship (highest honor for undergraduates in China)
- PUBLICATIONS [1] **X. Fei**, K. Tsotsos, and S. Soatto. "A Simple Hierarchical Pooling Data Structure for Loop Closure" In *Proceedings of the European Conference on Computer Vision (ECCV)*, 2016.  
[2] J. Dong\*, **X. Fei\***, and S. Soatto. "Visual-Inertial-Semantic Scene Representation for Object Detection" In *Proceedings of Computer Vision and Pattern Recognition (CVPR)*, 2017.
- PROFESSIONAL SERVICES Reviewer of ICCV 2017
- TALKS & WORKSHOPS Visual-Inertial-Semantic Scene Representation, Bridges to 3D Workshop, CVPR 2017
- RELEVANT COURSEWORK **University of California, Los Angeles:** Machine Perception (Prof. S. Soatto), Convex Optimization (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 (Prof. Z. Xiang), Spectral Analysis of Signals (Prof. X. Gong), Information Theory (Prof. Z. Zhang), Mathematical Modeling (Prof. Q. Yang)
- RELEVANT SKILLS **Programming Language:** C/C++, MATLAB, Python, AndroidOS, Verilog HDL  
**Software Frameworks:** ROS, OpenCV, g2o, Ceres-Solver, PyTorch