Office: B332, Brain Anderson Building 115. ANU, ACT 2601 Canberra, Australia. Email: suryansh.kumar@anu.edu.au Web: https://survanshkumar.github.io





### EDUCATION

The Australian National University, Canberra. Research Area: Computer Vision.

Advisors: Yuchao Dai, Hongdong Li, Richard Hartley.

IIIT-Hyderabad, India.

Research Area: Robot Vision. Advisor: K Madhava Krishna. PhD in Engineering and Computer Science. Sept 2015- Present.

M.S in Computer Science and Engineering.

Aug. 2013 (Thesis Defended).

### RESEARCH INTERESTS

Computer Vision: Structure from Motion, Motion Segmentation.

- Robot Vision: Visual SLAM, Mobile Object Tracking & Segmentation.
- Applied Mathematics: Machine Learning, Convex and Non-Convex Optimization, Abstract Algebra.

## Major Publications

[1]. Monocular Dense 3D Reconstruction of a Complex Dynamic Scene from Two Perspective Images. Authors: Suryansh Kumar, Yuchao Dai, Hongdong Li.

[2]. Spatio-Temporal Union of Subspaces for Multi-body Non-rigid Structure-from-Motion. Authors: Suryansh Kumar, Yuchao Dai, Hongdong Li.

[3]. Multibody Non-rigid Structure from Motion. Authors: Suryansh Kumar, Yuchao Dai, Hongdong Li.

[4]. Markov Random Field based Small Obstacle discovery over Images. Authors: Suryansh Kumar, Siva Karthik M, K Madhava Krishna.

Venice, Italy. Pattern Recognition 2017. Impact Factor: 4.582.

3DV 2016.

Stanford University, USA.

ICRA 2014. Hong Kong, China.

ICCV. 2017.

# Professional Experience

Reviewer: 3DV 2017.

TA for Individual Engineering Project Course (ENGN4200) Course Instructor: Yuchao Dai.

TA for Computer Vision Course (ENGN4528/6528)

Course Instructor: Jonghyuk Kim.

Consultant Engineer, Uurmi Systems Pvt. Limited, Hyderabad. Project Advisor: B.S Venkatesh.

Semester: Summer 2017(ANU).

Semester: Summer 2017(ANU).

July 2014 – June 2015.

### Research Experience

INRIA-Rhône-Alpes Grenoble, France.

Supervisors: Dizan Vasquez, Christian Laugier.

IIIT-Hyderabad, India. Supervisor: K. Madhava Krishna.

IIT-Hyderabad, India. Supervisor: P. Rajalakshmi. Research Intern, Sept 2013-Feb 2014.

Research Assistant, July 2011- Aug. 2013.

Project Associate, July 2010-Dec. 2010.

# AWARDS & ACHIEVEMENTS

- Finalist of CVPR NRSFM challenge 2017 sponsored by Disney Research. Invited for presentation.
- Student funding to attend ICML 17, Sydney Australia and ICCV 17, Venice Italy.
- Student funding to attend Robot Vision Summer School 2016, Kiola, Australia.
- Recipient of "Australian National University Higher Degree Research" Merit Scholarship Award.
- Recipient of "Best Innovative Group 2014", by Uurmi Systems Private Limited, India.
- Full-Time Funded Student by "Campus France", for research internship at INRIA, Grenoble-France.
- Full-Time Scholarship Student for MS program in IIIT-Hyderabad, India.
- Winner of "8085 Programming" and "Project Demonstration" contest organized at TITIKSHA 2008, SMVDU, J&K India.