Office: B332, Brain Anderson Building 115. ANU, ACT 2601 Canberra, Australia.

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Web: https://suryanshkumar.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 Madhaya Krishna.

PhD in Engineering and Computer Science. Sept 2015- Present.

M.S in Computer Science and Engineering.

Aug. 2013 (Thesis Defended).

3DV 2016.

#### 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.

Venice, Italy.

[2]. Spatio-Temporal Union of Subspaces for Multi-body Non-rigid Structure-from-Motion.

Authors: Suryansh Kumar, Yuchao Dai, Hongdong Li.

Pattern Recognition 2017.

Impact Factor: 4.582.

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

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.

Stanford University, USA.

ICRA 2014.

Hong Kong, China.

## Professional Experience

Reviewer: 3DV 2017.

• TA for Individual Engineering Project Course (ENGN4200) Semester: Summer 2017(ANU).

Course Instructor: Yuchao Dai.

• TA for Computer Vision Course (ENGN4528/6528) Semester: Summer 2017(ANU). Course Instructor: Jonghyuk Kim.

• Consultant Engineer, Uurmi Systems Pvt. Limited, Hyderabad.

Project Advisor: B.S Venkatesh.

July 2014 – June 2015.

## RESEARCH EXPERIENCE

INRIA-Rhône-Alpes Grenoble, France.

Supervisors: Dizan Vasquez, Christian Laugier.

Research Intern, Sept 2013-Feb 2014.

• IIIT-Hyderabad, India. Research Assistant, July 2011- Aug. 2013. Supervisor: K. Madhaya Krishna.

• IIT-Hyderabad, India. Project Associate, July 2010-Dec. 2010. Supervisor: P. Rajalakshmi.

## AWARDS & ACHIEVEMENTS

- Finalist of CVPR NRSFM challenge 2017 sponsored by Disney Research. Invited for presentation.
- Student funding to attend ICML 17, Sydney Australia.
- 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.