

# SHWETHA RAM

## CONTACT

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## PROJECTS

- Deep Learning for Novel View Synthesis.
- Light Field video capture: Camera Array Calibration, 3D Reconstruction
- Captained team Eye2Eye (video conferencing with natural eye contact) that won multiple awards at Dolby IdeaQuest.
- Volumetric video formats that exploit content saliency and human perception. Proposed quality metrics for volumetric video.
- Neuron Segmentation in EM Images

## MISCELLANEOUS

- Volunteer Member, San Jose Astronomy Association
- Volunteer, Greene Scholars Programme focused on increasing STEM engagement for African American youth
- Carnatic Vocalist

## EDUCATION

### University of California Santa Barbara

2015 - 17

M.S, Electrical and Computer Engineering

M.S Project: Retargeting Virtual Worlds

Advisor: Prof. Matthew Turk

### National Institute of Technology Karnataka, Surathkal, India

2011 - 15

B.Tech, Electrical and Electronics Engineering

## WORK EXPERIENCE

### Dolby Laboratories, Inc., Image Technology Incubation, Advanced Technology Group

Senior Software Dev – Image Tech R&D

Jan 19 – Present

Software Dev – Image Tech R&D

March 17 – Dec 18

Image Processing Intern

June – Dec 16

Working with an interdisciplinary team on solutions to capture, represent, transmit, render and display immersive content for applications like AR and VR. Exploring new opportunities for Dolby in this space.

### UC Santa Barbara Department of Physics

Spring 2016

Teaching Assistant - PHY 127AL Analog Electronics

### Indian Academy of Sciences - Summer Research Fellowship

Computer Vision and Artificial Intelligence Lab, Indian Institute of Science, May – July 2014

Advisor: Dr. K. R. Ramakrishnan

Built Projector-Camera display systems

### Computer Vision and Artificial Intelligence Lab, IISc. – Summer Internship

May – July 13

Built a system that tracked the foot movements of a dancer using a KINECT and played back a suitable percussion sound.

## SKILLS

C/C++, Python, Matlab, some Javascript. Tensorflow, Keras.

## PATENTS

**Multi-Resolution Multi-View Video Rendering**, Lakshman, Haricharan, Jia, Wenhui, Chao, Jasper, Ram, Shwetha, Baricevic, Domagoj, Ninan, Ajit, U.S Patent 20200288114

**Representing Volumetric Video in Saliency Video Streams**, Ajit Ninan, Shwetha Ram, Gregory John Ward, Domagoj Baricevic, Vijay Kamarshi, Patent Application U.S. 63/039,589, European 20180178.4. Patent Pending.