

# SUNDARA TEJASWI DIGUMARTI

Doctoral Student Autonomous Systems Lab ETH Zürich

### Contact

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### Website

tejaswid.github.io

### Languages

**English** 

Telugu Fluent

Hindi

German Conversational

French

Sanskrit Beginner

### **Hobbies**

Painting Sculpting
Hiking Cooking
Table Tennis Video Games

### **Education**

PhD. in Robotics (2019 expected) ETH Zürich, Switzerland 3D Reconstruction of Natural Structures Disney Research

MSc. in Robotics, Systems and Control (2012 -2014) ETH Zürich, Switzerland

MSc. in Robotics, Systems and Control (2012 -2014)
Re-acquisition of People using Clothing Characterization

BTech. in Electrical Engineering (2008 - 2012)

Development of a Smart Wheelchair

## opment of a Smart wheelchair

Work Experience

Research Intern - Winter 2013 TCS Innovation Labs, India

IIT Jodhpur, India

Gesture based control for a service robot

Research Intern - Summer 2011 CNBI, EPFL, Switzerland

Benchmarked classification techniques on the Opportunity - Human Activity dataset

### Skills

Programming C/C++, Python, ROS, Matlab, CUDA, AVR, Arduino

Deep Learning Tensorflow, PyTorch

Creative Design Blender, Illustrator, Photoshop

CAD OnShape

Circuit Design KiCAD

Workshop Skills 3D Printing, Laser Cutting, Soldering, Welding, Casting, Turning

### **Publications**

1. S. T. Digumarti, J. Nieto, C. Cadena, R. Siegwart, P. Beardsley, Automatic segmentation of Tree Structure from Point Cloud Data. IEEE Robotics and Automation Letters (RAL), 2018

- S. T. Digumarti, G. Chaurasia, A. Taneja, R. Siegwart, A. Thomas, P. Beardsley, Underwater 3D capture using a low-cost commercial depth camera.
   IEEE Winter Conference on Applications of Computer Vision (WACV), 2016
- 3. M. Kriegleder, S. T. Digumarti, R. Oung, R. d'Andrea, Rendezvous with bearing-only information and limited sensing range. IEEE Conference on Robotics and Automation (ICRA), 2015
- 4. R. Chavarriaga, H. Sagha, A. Calatroni, S. T. Digumarti, G. Tröster, J. D. R. Millán, D. Roggen, *The Opportunity challenge: A benchmark database for on-body sensor-based activity recognition*. Pattern Recognition Letters, 34(15), 2013
- A. Trivedi, A. Singh, S. T. Digumarti, D. Fulwani, S. Kumar, Design and Implementation of a Smart Wheelchair. Advances in Robotics, International Conference of Robotics Society of India, 2013
- H. Sagha, S. T. Digumarti, J. D. R. Millán, A. Calatroni, D. Roggen, G. Tröster,
   D. Bannach, P. Lukowicz, A. Ferscha, R. Chavarriaga, Workshop on robust machine learning techniques for human activity recognition: Activity recognition challenge. IEEE International Conference on Systems, Man, and Cybernetics (SMC), 2011
- 7. H. Sagha, S. T. Digumarti, J. D. R. Millán, R. Chavarriaga, A. Calatroni, D. Roggen, G. Tröster, *Benchmarking classification techniques using the Opportunity human activity dataset*. IEEE International Conference on Systems, Man, and Cybernetics, 2011

### **Awards and Achievements**

- 1. Best Paper Award at Advances in Robotics, Pune, India, 2013
- 2. Cleared the 1st round of Bristol's Basecamp Enterprise competition, 2018-19
- 3. Won gold at national level Shotokan Karate competition, 2005