



SUNDARA TEJASWI DIGUMARTI

Doctoral Student
Autonomous Systems Lab
ETH Zürich

Contact

B201, Loorenstrasse 74,
8053 Zürich, Switzerland.

dtejaswi@mavt.ethz.ch,
sundaratejaswi@gmail.com

+41 789495375

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) <i>3D Reconstruction of Natural Structures</i>	ETH Zürich, Switzerland Disney Research
MSc. in Robotics, Systems and Control (2012 -2014) <i>Re-acquisition of People using Clothing Characterization</i>	ETH Zürich, Switzerland
B.Tech in Electrical Engineering (2008 - 2012) <i>Development of a Smart Wheelchair</i>	IIT Jodhpur, India

Work Experience

Research Intern - Winter 2013 <i>Gesture based control for a service robot</i>	TCS Innovation Labs, India
Research Intern - Summer 2011 <i>Benchmarked classification techniques on the Opportunity - Human Activity dataset</i>	CNBI, EPFL, Switzerland

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, L. M. Schmid, G. M. Rizzi, J. Nieto, R. Siegwart, P. Beardsley, C. Cadena
An approach for semantic segmentation of tree-like vegetation
IEEE International Conference on Robotics and Automation (ICRA), 2019
2. 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
3. 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
4. M. Kriegleder, S. T. Digumarti, R. Oung, R. d'Andrea,
Rendezvous with bearing-only information and limited sensing range.
IEEE International Conference on Robotics and Automation (ICRA), 2015
5. 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
6. 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
7. 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
8. 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