

# SAI SAKETH RAMBHATLA

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- CONTACT INFORMATION** Room No. 4116,  
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University of Maryland, College Park, MD. 20740 [rssaketh@umd.edu](mailto:rssaketh@umd.edu)
- EDUCATION** **University of Maryland, College Park** **Aug 2016 - Present**  
PhD., Electrical and Computer Engineering  
Advisor: Dr. Rama Chellappa
- Indian Institute of Technology, Kharagpur** **July 2011- May 2016**  
Dual Degree, Electrical Engineering
- PUBLICATIONS** **The Pursuit of Knowledge: Discovering and Localizing New concepts using Dual Memory**  
*Saketh Rambhatla*, Rama Chellappa, Abhinav Shrivastava  
*Under Review* Conference on Computer Vision and Pattern Recognition
- To Boost or not to Boost: On the Limits of Boosted Neural Networks**  
*Saketh Rambhatla*, Michael Jones, Rama Chellappa  
*Under Review* Neurocomputing
- Towards real-time systems for vehicle re-identification, multi-camera tracking, and anomaly detection**  
Peri N.\*, Khorramshahi P.\*, *Rambhatla S.\**, Shenoy V., Rawat S., Chen J.C. , Chellappa R.  
Conference on Computer Vision and Pattern Recognition Workshops, 2020
- Detecting Human-Object Interactions using Functional Common-Sense**  
Ankan Bansal, *Sai Rambhatla*, Rama Chellappa, Abhinav Shrivastava  
Thirty-Fourth AAAI Conference on Artificial Intelligence, 2020
- Spatial Priming for Detecting Human-Object Interactions**  
Ankan Bansal, *Sai Rambhatla*, Rama Chellappa, Abhinav Shrivastava  
Arxiv preprint
- A dual-path model with adaptive attention for vehicle re-identification**  
Khorramshahi P., Kumar A., Peri N., *Rambhatla S. S.*, Jun-Cheng Chen, Rama Chellappa  
International Conference on Computer Vision, 2019
- Body Part Alignment and Temporal Attention for Video-Based Person Re-Identification**  
*Sai Rambhatla*, Michael Jones  
Proceedings of the British Machine Vision Conference (BMVC), Cardiff, UK, 2019
- Deep Gesture: Static hand gesture recognition using CNN**  
Aparna Mohanty, *Sai Rambhatla*, Rajeev Ranjan Sahay  
CVIP 2016
- Camera based estimation of respiration rate by analyzing shape and size variation of structured light**  
V. V. Makkapati and *Sai Rambhatla*  
International Conference on Acoustics, Speech and Signal Processing (ICASSP), 2016
- Remote Monitoring of Camera based Respiration Rate Estimated by Using Occlusion of Dot Pattern**  
V.V. Makkapati and *Sai Rambhatla*  
IEEE Advanced Networks and Telecommunication Systems(ANTS), Bangalore,2016

PROFESSIONAL EXPERIENCE	<p><b>Mitsubishi Electric Research Laboratories</b>  <i>Intern, Computer Vision</i> <span style="float: right;"><b>May - August 2019</b></span>  <i>Mentor - Dr. Michael Jones</i>  Worked on the Boosting for Convolution Neural Networks</p> <p><b>Mitsubishi Electric Research Laboratories</b>  <i>Intern, Computer Vision</i> <span style="float: right;"><b>May - August 2018</b></span>  <i>Mentor - Dr. Michael Jones</i>  Worked on the alignment problem in Video Based Person Re-identification</p> <p><b>Philips Innovation Campus</b>  <i>Intern, Computer Vision and Image Processing</i> <span style="float: right;"><b>May - July 2015</b></span>  <i>Mentor - Mr. Vishnu Makkapati</i>  Developed algorithms for Camera based estimation of Respiratory rate in humans</p> <p><b>University College Cork, Ireland</b>  <i>Visiting Student Researcher</i> <span style="float: right;"><b>May - July 2014</b></span>  <i>Mentor - Dr. Emanuel Popovici</i>  Designed and developed a novel sensor for measuring vital signs(respiratory and heart rate) of humans</p>
ASSISTANTSHIP	<p><b>Research Assistant</b> <span style="float: right;"><b>Jan 2018 - Present</b></span>  <i>Advisor - Dr. Rama Chellappa, Dr. Abhinav Shrivastava</i>  Currently working on Visual Object Category Discovery and Human object interaction Detection</p> <p><b>Teaching Assistant</b> <span style="float: right;"><b>Aug 2016 - Dec 2017</b></span>  <i>Discrete time Signal analysis - Undergraduate</i>  <i>Engineering Probability theory - Undergraduate</i>  <i>Digital Signal Processing - Undergraduate</i>  <i>Advanced Digital Signal Processing - Graduate</i>  Assisted Lead Professor in designing experiments, assignments and grading students performance</p>
RELEVANT COURSEWORK	<p><b>University of Maryland, College Park</b></p> <ul style="list-style-type: none"> <li>• Advanced Digital Signal Processing</li> <li>• Information Theory</li> <li>• Image Understanding</li> <li>• Estimation and Detection Theory</li> <li>• Convex Optimization</li> <li>• Advanced Numerical Optimization</li> <li>• Deep learning for Visual Recognition</li> <li>• Stochastic and Random Processes</li> <li>• Statistical Pattern Recognition</li> <li>• Compilers</li> </ul>
SKILLS	<p><b>Languages</b> : C/C++, Python  <b>Softwares</b> : Matlab, Pytorch, Tensorflow, Caffe, OpenCV  <b>Operating System</b> : Windows, Linux, MacOS</p>
ACHIEVEMENTS	<p>Awarded <b>Outstanding Teaching Fellow</b> for the academic year 2018-19 and 2019-20 by the department of ECE, UMD</p> <p>Awarded the prestigious <b>George Corcoran Award</b> for the academic year 2017-18 in recognition of excellence in teaching by a Graduate Student</p> <p>Awarded <b>Outstanding Teaching Assistant Award</b> for the academic year 2017-18 by the department of ECE, UMD</p> <p>Honorary Mention Award at IEEE International Conference ANTS 2016</p>