

# Siddhartha Chandra

<https://siddharthachandra.github.io/>

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## Education

2014–2018	<b>PhD in Machine Vision</b> <b>INRIA Galen &amp; Ecole Centrale-Supélec Paris</b>
2007–2013	<b>Bachelor of Technology (Honours) + Master of Science by Research</b> Major: Computer Science. Research Thesis: <i>Learning Representations for Computer Vision</i> <b>IIIT Hyderabad. CGPA: 9.3/10</b>

## Research Positions

2021–today	<b>Senior Applied Scientist, Amazon Halo, USA</b>
2019–2021	<b>Applied Scientist, Amazon Halo, USA</b>
2018–2019	<b>Research Scientist, Amazon Halo, USA</b>
2018	<b>Computer Vision Post-Doctoral Researcher, SNCF &amp; Railenium, Paris</b>
2017	<b>Research Intern, Facebook Artificial Intelligence Research, Paris</b>
2014–2018	<b>PhD Student, INRIA Galen &amp; Centrale-Supélec Paris</b>
2009–2013	<b>Research Assistant, Center for Visual Information Technology, IIIT Hyderabad</b>
2010–2011	<b>Research student visitor, Visual Geometry Group, University of Oxford</b>

## Selected Publications

2021	<b>Smartphone Camera Based Assessment of Adiposity: A Multi-Site Validation Study</b> M Majumdar, S Chandra et al. <i>Nature Portfolio Journal on Digital Medicine</i>
2020	<b>Box2Seg: Attention Weighted Loss and Discriminative Feature Learning for Weakly Supervised Segmentation</b> S Chandra*, V Kulharia* et al. <i>ECCV, ONLINE</i>
2020	<b>Deep Learning-Based Concurrent Brain Registration and Tumor Segmentation</b> T. Estienne, Siddhartha Chandra et al. <i>Journal: Frontiers in Computational Neuroscience</i>
2019	<b>Proof of Correctness and Time Complexity Analysis of a Maximum Distance Transform Algorithm</b> M. Sahasrabudhe & Siddhartha Chandra <i>ArXiv</i>
2019	<b>Learning to Generate Synthetic Data via Compositing</b> Siddhartha Chandra*, Shashank Tripathi* et al. <i>CVPR, USA</i>
2018	<b>Context Aware 3D CNNs for Brain Tumor Segmentation.</b> Siddhartha Chandra, Maria Vakalopoulou et al. <i>MICCAI BrainLesion, Spain</i>
2018	<b>Deep Spatio-Temporal Random Fields for Efficient Video Segmentation.</b> Siddhartha Chandra, Camille Couprie, Iasonas Kokkinos. <i>CVPR, USA</i>
2017	<b>Structured Output Prediction and Learning for Deep Monocular 3D Human Pose Estimation.</b> S. Kinauer, A. Guler, S. Chandra, I. Kokkinos. <i>EMMCVPR, Italy</i>
2017	<b>Dense and Low-Rank Gaussian CRFs Using Deep Embeddings.</b> Siddhartha Chandra, Nicholas Usunier, Iasonas Kokkinos. <i>ICCV, Italy</i>
2016	<b>Fast, Exact and Multi-Scale Inference for Semantic Image Segmentation with Deep Gaussian CRFs.</b> Siddhartha Chandra, Iasonas Kokkinos. <i>ECCV, Netherlands</i>
2016	<b>Human Joint Angle Estimation and Gesture Recognition for Assistive Robotic Vision.</b> Alp Guler, Siddhartha Chandra, Iasonas Kokkinos et.al. <i>Oral, ECCV Workshop</i>
2015	<b>Accurate Human-Limb Segmentation in RGB-D images for Intelligent Mobility Assistance Robots.</b> Siddhartha Chandra, S. Tsogkas, I. Kokkinos. <i>Oral, ICCV Workshop</i>
2015	<b>Surface Based Object Detection in RGBD Images.</b> Siddhartha Chandra, Grigoris Chrysos, Iasonas Kokkinos. <i>Oral Presentation, BMVC, Wales</i>
2013	<b>Partial Least Squares Kernel for Computing Similarities between Video Sequences.</b> Siddhartha Chandra, C.V. Jawahar. <i>Oral Presentation, ICPR, Japan</i>
2012	<b>Learning Non-Linear Supspaces using K-RBMs.</b> Siddhartha Chandra, Shailesh Kumar, C.V. Jawahar. <i>CVPR, USA</i>

## Patents

Filed	4 patents
2021	Generation of synthetic image data using three-dimensional models
2020	Generation of synthetic image data for computer vision models

## Conference & Journal Reviewing History

2015-today	International Conference of Computer Vision IEEE Conference on Computer Vision & Pattern Recognition European Conference on Computer Vision Journal of Photogrammetry and Remote Sensing CARS Journal: Computer Vision & Image Understanding Journal: Neurocomputing International Conference on Advanced Video and Signal-based Surveillance Indian Conference on Vision, Graphics & Image Processing
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## Other Positions

- ★ **Program Committee**, 2018 CfP Graphs in Biomedical Image Analysis Workshop GRAIL, MICCAI, Spain
- ★ **System Administrator**, CVN, Centrale-Supélec Paris
- ★ **System Administrator**, CVIT, IIIT Hyderabad
- ★ **Teaching Assistant** for the following courses at IIIT Hyderabad through the 3<sup>rd</sup> – 5<sup>th</sup> year: **Computer Vision** (1 *semester*), **C Programming** (2 *semesters*), **Algorithms** (1 *semester*), **Information Technology** (2 *semesters*).

## Skill Set

Programming	C, C++, Python, Bash, MATLAB
Libraries	Caffe, Caffe-2, pyTorch, Eigen, CUDA

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