

SIDDHARTHA CHAUDHURI

CURRICULUM VITAE

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RESEARCH INTERESTS

Data-driven geometric computing; 3D shape analysis, editing and synthesis

EDUCATION

2011	Ph.D.	Computer Science	Stanford University
		<i>Dissertation: 3D Modeling with Data-Driven Suggestions; Supervisor: Vladlen Koltun</i>	
2009	M.S.	Computer Science	Stanford University
2005	B.Tech.	Computer Science & Engineering	IIT Kanpur

EMPLOYMENT AND RESEARCH APPOINTMENTS

2017-present	Senior Research Scientist	Creative Intelligence Lab, Adobe Research
2017-2022	Assistant Professor (on leave)	Dept. of Computer Science & Engg., IIT Bombay
2015-2017	Assistant Professor	Dept. of Computer Science & Engg., IIT Bombay
2014-2015	Lecturer	Dept. of Computer Science, Cornell University
2012-2014	Postdoctoral Research Associate	Dept. of Computer Science, Princeton University (supervisor: Thomas Funkhouser)
2011-2012	Postdoctoral Research Fellow	Dept. of Computer Science, Stanford University (supervisors: Thomas Funkhouser, Vladlen Koltun)
2012	Architect & Chief Developer	FUSE Character Modeler, Mixamo Inc. (acquired by Adobe and released as part of Adobe Creative Cloud) https://www.adobe.com/products/fuse.html
2009-2011	Research Assistant	Dept. of Computer Science, Stanford University (supervisor: Vladlen Koltun)
2005-2008	Stanford Graduate Fellow	Dept. of Computer Science, Stanford University (supervisor: Vladlen Koltun)
2004	Research Intern	École Polytechnique Fédérale de Lausanne (supervisor: Edoardo Charbon)
2001-2005	Undergraduate Researcher	Dept. of Computer Science & Engg., IIT Kanpur (supervisors: Shashank K. Mehta, Ratan K. Ghosh, Amitabha Mukerjee)

HONOURS AND AWARDS (SELECTED LIST)

2022	Medal for Young Scientists, Indian National Science Academy
2018	Early Research Achiever Award (2017), IIT Bombay
2017	ACM press releases on SIGGRAPH & SIGGRAPH Asia papers (the conferences did not have best paper awards until 2022)
2015-2018	Institute Chair Assistant Professorship, IIT Bombay
2015	Selected as one of five Outstanding Faculty Members (across all departments) by the Cornell Class Council of 2018
2005-2008	PACCAR Inc. Stanford Graduate Fellowship
2005	Director's Gold Medal for Best All-Round Achievement and Leadership, IIT Kanpur
2005	Dr. V. Rajaraman Scholarship for Best Final Year Student in Computer Science (based on academic performance in 2001-04), IIT Kanpur
2002	Lucent Global Science Scholar
2000	The Telegraph Award for Best All-Round Student in the state of West Bengal, India
1999-2005	National Talent Search Scholarship, Govt. of India

Awards won by student research advisees:

- Owais Khan: Research Excellence Award (B. Tech.), IIT Bombay CSE, 2017
- Sanjeev Mk: Research Excellence Award (M. Tech.), IIT Bombay CSE, 2017
- Priyadarshini K: TCS Research Fellowship, 2016-2019
- Sanjeev Mk: Qualcomm Innovation Fellowship, India, 2016

PROFESSIONAL ACTIVITIES

- Keynote/Plenary Talks:
 - SMI 2021
 - NCVPRIPG 2019
 - NCVPRIPG 2017
- Journal Editorships: Computer Graphics Forum (Associate Editor, 2023-26), IEEE Trans. Visualization and Computer Graphics (Associate Editor, 2024-).
- Program Committee Member: SIGGRAPH 2024, Eurographics 2024, SIGGRAPH 2023, SGP 2022, IJCAI-ECAI 2022 Special Track on AI, the Arts and Creativity, SGP 2021, SGP 2020, IJCAI-PRICAI 2020, Graphics Interface 2020, SMI-FASE 2020, SGP 2019, IJCAI 2019, Graphics Interface 2019, SMI-FASE 2019, CAD/Graphics 2019, ECCV 2018, SMI 2018, CVPR 2018, AAAI 2018 (and also Demos), CAD/Graphics 2017, AAAI 2017 Demos, SIGGRAPH Asia 2016 Virtual Reality Meets Physical Reality Workshop, Eurographics 2015 (State-of-the-Art Reports, Short Papers), 2014 (Short Papers); SIGGRAPH Asia 2014 Workshop on Creative Shape Modeling and Design.
- Reviewer: SIGGRAPH, SIGGRAPH Asia, TOG, TPAMI, CVPR, ICCV, ECCV, CHI, UIST, NeurIPS, AAAI, ICLR, Eurographics, TVCG, Computer Graphics Forum, Computer-Aided Design, The Visual Computer, Shape Modeling International, CAD/Graphics, Graphical Models, Transactions on Information Systems.

- Workshop Organization:
 - ICCV 2021 Workshop on *Structural and Compositional Learning on 3D Data*.
 - CVPR 2021 Workshop on *Learning to Generate 3D Shapes and Scenes*.
 - CVPR 2020 Workshop on *Learning 3D Generative Models*.
 - Tristate Workshop on Imaging and Graphics 2014.
- Conference Administration: SIGGRAPH 2021 (Technical Papers Conflict of Interest Coordinator), ICVGIP 2020-21 (Winter School/Tutorials Co-Chair).
- (Non-University) Tutorial/Course Instructor:
 - *ACM India Summer School on Shape Modelling*, IIIT-Delhi (with Kaushik Kalyanaraman, Vijay Natarajan, Ramanathan M., Geetika Sharma, Aditya Tatu, and Ojaswa Sharma).
 - *Learning to Generate 3D Structures*, Eurographics 2019 (with Daniel Ritchie, Kai Xu, and Hao Zhang).
 - *The Semantics of Shape*, ICVGIP 2016.
 - *Data-Driven Visual Computing*, SIGGRAPH Asia 2014 (with Alexei Efros, Leonidas Guibas, Shi-Min Hu, Ariel Shamir, Kai Xu, and Jun-Yan Zhu).
- Technical Advisor: Mixamo Inc. (now acquired by Adobe).
- Public-Domain Software: The `THEA` graphics and geometry processing library, used in Mixamo Inc.'s (now Adobe's) `FUSE` character modeling tool and various research projects.
<https://sidch.github.io/Thea>
- Author: *The Raytracing Repository*, a reference website on raytracing. Cited in university course materials, technical papers and popular science articles. Frequently recommended as a primary resource for beginners.

UNIVERSITY TEACHING

Spring 2017	CS749: Digital Geometry Processing	Instructor	IIT Bombay
Fall 2016	CS475/675: Computer Graphics	Instructor	IIT Bombay
Spring 2016	CS749: Digital Geometry Processing	Instructor	IIT Bombay
Spring 2015	CS2800: Discrete Structures	Instructor	Cornell
Spring 2015	CS2110: Object-Oriented Prog. & Data Structures	Instructor	Cornell
Fall 2014	CS2800: Discrete Structures	Instructor	Cornell
Spring 2013	COS436: Human-Computer Interface Technology	Guest Lecturer	Princeton
Winter 2012	CS248: Interactive Computer Graphics	Guest Lecturer	Stanford
Winter 2011	CS248: Interactive Computer Graphics	Guest Lecturer	Stanford
Summer 2010	CS148: Introduction to Computer Graphics	Instructor	Stanford

PUBLICATIONS

Peer-reviewed

1. Qimin Chen, Zhiqin Chen, Vladimir Kim, Noam Aigerman, Hao Zhang, and **Siddhartha Chaudhuri** (2024). DECOLLAGE: 3D Detailization by Controllable, Localized, and Learned Geometry Enhancement. In: *Proc. ECCV*.

2. Sanjeev Muralikrishnan, Niladri Shekhar Dutt, **Siddhartha Chaudhuri**, Noam Aigerman, Vladimir Kim, Matthew Fisher, and Niloy J. Mitra (2024). Temporal Residual Jacobians for Rig-free Motion Transfer. In: *Proc. ECCV*.
3. Dmitry Petrov, Pradyumn Goyal, Vikas Thamizharasan, Vladimir Kim, Matheus Gadelha, Melinos Averkiou, **Siddhartha Chaudhuri**, and Evangelos Kalogerakis (2024). GEM3D: Generative Medial Abstractions for 3D Shape Synthesis. In: *Proc. SIGGRAPH (Conference Track)*.
4. R. Kenny Jones, **Siddhartha Chaudhuri**, and Daniel Ritchie (2024). Learning to Infer Generative Template Programs for Visual Concepts. In: *Proc. ICML*.
5. Arman Maesumi, Paul Guerrero, Vladimir Kim, Matthew Fisher, **Siddhartha Chaudhuri**, Noam Aigerman, and Daniel Ritchie (2023). Explorable Mesh Deformation Subspaces from Unstructured 3D Generative Models. In: *Proc. SIGGRAPH Asia (Conference Track)*.
6. Otman Benchekroun, Jiayi Eris Zhang, **Siddhartha Chaudhuri**, Eitan Grinspun, Yi Zhou, and Alec Jacobson (2023). Fast Complementary Dynamics via Skinning Eigenmodes. *ACM Transactions on Graphics (Proc. SIGGRAPH Journal Track)* 42(4).
7. Xianghao Xu, Paul Guerrero, Matthew Fisher, **Siddhartha Chaudhuri**, and Daniel Ritchie (2023). Unsupervised 3D Shape Reconstruction by Part Retrieval and Assembly. In: *Proc. CVPR*.
8. Bo Sun, Vladimir Kim, Qixing Huang, Noam Aigerman, and **Siddhartha Chaudhuri** (2022). PatchRD: Detail-Preserving Shape Completion by Learning Patch Retrieval and Deformation. In: *Proc. ECCV*.
9. Kai Wang, Paul Guerrero, Vladimir Kim, **Siddhartha Chaudhuri**, Minhyuk Sung, and Daniel Ritchie (2022). The Shape Part Slot Machine: Contact-based Reasoning for Generating 3D Shapes from Parts. In: *Proc. ECCV*.
10. Noam Aigerman, Kunal Gupta, Vladimir G. Kim, **Siddhartha Chaudhuri**, Jun Saito, and Thibault Groueix (2022). Neural Jacobian Fields: Learning Intrinsic Mappings of Arbitrary Meshes. *ACM Transactions on Graphics (Proc. SIGGRAPH Journal Track)* 41(4).
11. Sanjeev Muralikrishnan, **Siddhartha Chaudhuri**, Noam Aigerman, Vladimir G. Kim, Matthew Fisher, and Niloy Mitra (2022). GLASS: Geometric Latent Augmentation for Shape Spaces. In: *Proc. CVPR*.
12. Danyong Zhao, Yijing Li, **Siddhartha Chaudhuri**, Timothy Langlois, and Jernej Barbič (2022). ERGOBOSS: Ergonomic Optimization of Body-Supporting Surfaces. *IEEE Trans. Visualization and Computer Graphics* 28(12).
13. Pratheba Selvaraju, Mohamed Nabail, Marios Loizou, Maria Maslioukova, Melinos Averkiou, **Siddhartha Chaudhuri**, and Evangelos Kalogerakis (2021). BuildingNet: Learning to Label 3D Buildings. In: *Proc. ICCV (oral)*.
14. Jan Bednarik, Vladimir G. Kim, **Siddhartha Chaudhuri**, Shaifali Parashar, Mathieu Salzmann, Pascal Fua, and Noam Aigerman (2021). Temporally-Coherent Surface Reconstruction via Metric-Consistent Atlases. In: *Proc. ICCV*.
15. Priyadarshini K, **Siddhartha Chaudhuri**, Vivek Borkar, and Subhasis Chaudhuri (2021). A Unified Batch Selection Policy for Active Metric Learning. In: *Proc. ECML PKDD*.

16. Zhiqin Chen, Vladimir G. Kim, Matthew Fisher, Noam Aigerman, Hao Zhang, and **Siddhartha Chaudhuri** (2021). DECOR-GAN: 3D Shape Detailization by Conditional Refinement. In: *Proc. CVPR (oral)*.
17. Mikaela Angelina Uy, Vladimir G. Kim, Minhyuk Sung, Noam Aigerman, **Siddhartha Chaudhuri**, and Leonidas Guibas (2021). Joint Learning of 3D Shape Retrieval and Deformation. In: *Proc. CVPR*.
18. Kangxue Yin, Zhiqin Chen, **Siddhartha Chaudhuri**, Matthew Fisher, Vladimir G. Kim, and Hao Zhang (2020). COALESCE: Component Assembly by Learning to Synthesize Connections. In: *Proc. 3DV (oral)*.
19. Xianghao Xu, David Charatan, Sonia Raychaudhuri, Hanxiao Jiang, Mae Heitmann, Vladimir G. Kim, **Siddhartha Chaudhuri**, Manolis Savva, Angel Chang, and Daniel Ritchie (2020). Motion Annotation Programs: A Scalable Approach to Annotating Kinematic Articulations in Large 3D Shape Collections. In: *Proc. 3DV*.
20. Gopal Sharma, Difan Liu, Evangelos Kalogerakis, Subhansu Maji, **Siddhartha Chaudhuri**, and Radomír Měch (2020). ParSeNet: A Parametric Surface Fitting Network for 3D Point Clouds. In: *Proc. ECCV*.
21. Hsueh-Ti Derek Liu, Vladimir G. Kim, **Siddhartha Chaudhuri**, Noam Aigerman, and Alec Jacobson (2020). Neural Subdivision. *ACM Transactions on Graphics (Proc. SIGGRAPH)* **39**(4).
22. Priyadarshini K, Ritesh Goru, **Siddhartha Chaudhuri**, and Subhasis Chaudhuri (2020). Batch Decorrelation for Active Metric Learning. In: *Proc. IJCAI-PRICAI*.
23. Wang Yifan, Noam Aigerman, Vladimir G. Kim, **Siddhartha Chaudhuri**, and Olga Sorkine-Hornung (2020). Neural Cages for Detail-Preserving 3D Deformations. In: *Proc. CVPR (oral)*.
24. Chenyang Zhu, Kai Xu, **Siddhartha Chaudhuri**, Li Yi, Leonidas Guibas, and Hao Zhang (2020). AdaCoSeg: Adaptive Shape Co-Segmentation with Group Consistency Loss. In: *Proc. CVPR (oral)*.
25. Chu Wang, Babak Samari, Vladimir G. Kim, **Siddhartha Chaudhuri**, and Kaleem Siddiqi (2020). Affinity Graph Supervision for Visual Recognition. In: *Proc. CVPR*.
26. **Siddhartha Chaudhuri**, Daniel Ritchie, Jiajun Wu, Kai Xu, and Hao Zhang (2020). Learning Generative Models of 3D Structures. *Eurographics State-of-the-Art Reports (STAR)*.
27. Zhiqin Chen, Kangxue Yin, Matthew Fisher, **Siddhartha Chaudhuri**, and Hao Zhang (2019). BAE-NET: Branched Autoencoder for Shape Co-Segmentation. In: *Proc. ICCV*.
28. Priyadarshini K, **Siddhartha Chaudhuri**, and Subhasis Chaudhuri (2019). PerceptNet: Learning Perceptual Similarity of Haptic Textures in Presence of Unorderable Triplets. In: *Proc. World Haptics Conference*.
29. Sanjeev Muralikrishnan, Vladimir G. Kim, Matthew Fisher, and **Siddhartha Chaudhuri** (2019). Shape Unicode: A Unified Shape Representation. In: *Proc. CVPR*.

30. Manyi Li, Akshay Gadi Patil, Kai Xu, **Siddhartha Chaudhuri**, Owais Khan, Ariel Shamir, Changhe Tu, Baoquan Chen, Daniel Cohen-Or, and Hao Zhang (2019). GRAINS: Generative Recursive Autoencoders for INdoor Scenes. *ACM Transactions on Graphics* **38**(2).
31. Chenyang Zhu, Kai Xu, **Siddhartha Chaudhuri**, Renjiao Yi, and Hao Zhang (2018). SCORES: Shape Composition with Recursive Substructure Priors. *ACM Transactions on Graphics (Proc. SIGGRAPH Asia)* **37**(6).
32. Hubert Lin, Melinos Averkiou, Evangelos Kalogerakis, Balazs Kovacs, Siddhant Ranade, Vladimir G. Kim, **Siddhartha Chaudhuri**, and Kavita Bala (2018). Learning Material-Aware Local Descriptors for 3D Shapes. In: *Proc. 3DV*.
33. Sanjeev Muralikrishnan, Vladimir G. Kim, and **Siddhartha Chaudhuri** (2018). Tags2Parts: Discovering Semantic Regions from Shape Tags. In: *Proc. CVPR*.
34. Shiv Shankar, Vihari Piratla, Soumen Chakrabarti, **Siddhartha Chaudhuri**, Preethi Jyothi, and Sunita Sarawagi (2018). Generalizing Across Domains via Cross-Gradient Training. In: *Proc. ICLR*.
35. Haibin Huang, Evangelos Kalogerakis, **Siddhartha Chaudhuri**, Duygu Ceylan, Vladimir G. Kim, and Ersin Yumer (2018). Learning Local Shape Descriptors from Part Correspondences with Multiview Convolutional Networks. *ACM Transactions on Graphics* **37**(1).
36. Minhyuk Sung, Hao Su, Vladimir G. Kim, **Siddhartha Chaudhuri**, and Leonidas Guibas (2017). ComplementMe: Weakly-Supervised Component Suggestion for 3D Modeling. *ACM Transactions on Graphics (Proc. SIGGRAPH Asia)* **36**(6).
37. Jun Li, Kai Xu, **Siddhartha Chaudhuri**, Ersin Yumer, Hao Zhang, and Leonidas Guibas (2017). GRASS: Generative Recursive Autoencoders for Shape Structures. *ACM Transactions on Graphics (Proc. SIGGRAPH)* **36**(4).
38. Evangelos Kalogerakis, Melinos Averkiou, Subhransu Maji, and **Siddhartha Chaudhuri** (2017). 3D Shape Segmentation with Projective Convolutional Networks. In: *Proc. CVPR (oral)*.
39. Xuekun Guo, Juncong Lin, Kai Xu, **Siddhartha Chaudhuri**, and Xiaogang Jin (2016). CustomCut: On-demand Extraction of Customized 3D Parts with 2D Sketches. In: *Proc. Symposium on Geometry Processing*.
40. Ersin Yumer, **Siddhartha Chaudhuri**, Jessica K. Hodgins, and Levent Burak Kara (2015). Semantic Shape Editing Using Deformation Handles. *ACM Transactions on Graphics (Proc. SIGGRAPH)* **34**(4).
41. Tianqiang Liu, **Siddhartha Chaudhuri**, Vladimir G. Kim, Qixing Huang, Niloy J. Mitra, and Thomas Funkhouser (2014). Creating Consistent Scene Graphs Using a Probabilistic Grammar. *ACM Transactions on Graphics (Proc. SIGGRAPH Asia)* **33**(6).
42. Vladimir G. Kim, **Siddhartha Chaudhuri**, Leonidas Guibas, and Thomas Funkhouser (2014). Shape2Pose: Human-Centric Shape Analysis. *ACM Transactions on Graphics (Proc. SIGGRAPH)* **33**(4).
43. **Siddhartha Chaudhuri**, Evangelos Kalogerakis, Stephen Giguere, and Thomas Funkhouser (2013). AttrIt: Content Creation with Semantic Attributes. In: *Proc. UIST*.

44. Vladimir G. Kim, W. Li, Niloy J. Mitra, **Siddhartha Chaudhuri**, Stephen DiVerdi, and Thomas Funkhouser (2013). Learning Part-Based Templates from Large Collections of 3D Shapes. *ACM Transactions on Graphics (Proc. SIGGRAPH)* **32**(4).
45. Evangelos Kalogerakis, **Siddhartha Chaudhuri**, Daphne Koller, and Vladlen Koltun (2012). A Probabilistic Model for Component-Based Shape Synthesis. *ACM Transactions on Graphics (Proc. SIGGRAPH)* **31**(4).
46. **Siddhartha Chaudhuri**, Evangelos Kalogerakis, Leonidas Guibas, and Vladlen Koltun (2011). Probabilistic Reasoning for Assembly-Based 3D Modeling. *ACM Transactions on Graphics (Proc. SIGGRAPH)* **30**(4).
47. **Siddhartha Chaudhuri** and Vladlen Koltun (2010). Data-Driven Suggestions for Creativity Support in 3D Modeling. *ACM Transactions on Graphics (Proc. SIGGRAPH Asia)* **29**(6).
48. **Siddhartha Chaudhuri** and Vladlen Koltun (2009). Smoothed Analysis of Probabilistic Roadmaps. *Computational Geometry: Theory and Applications* **42**(8), 731–747.
49. **Siddhartha Chaudhuri**, Randhir K. Singh, and E. Charbon (2005). Feature-Based Techniques for Real-Time Morphable Model Facial Image Analysis. In: *Image and Video Communications and Processing Conference, IS&T/SPIE's 17th Annual Symposium on Electronic Imaging Science and Technology*. San Jose.
50. Manu Chhabra, Anusheel Nahar, Nishant Agrawal, Tamhant Jain, Amitabha Mukerjee, Apurva Mathad, and **Siddhartha Chaudhuri** (2004). Novel Approaches to Vision and Motion Control for Robot Soccer. In: *National Conference on Advanced Manufacturing and Robotics*. CMERI, Durgapur.

Not peer-reviewed

51. Utkarsh Mall, G. Roshan Lal, **Siddhartha Chaudhuri**, and Parag Chaudhuri (2017). A Deep Recurrent Framework for Cleaning Motion Capture Data. *CoRR* **abs/1712.03380**.
52. **Siddhartha Chaudhuri**, Daniel Horn, Pat Hanrahan, and Vladlen Koltun (2009). *Image-Based Exploration of Massive Online Environments*. Tech. rep. CSTR 2009-02. Stanford University.
53. **Siddhartha Chaudhuri**, Ratan K. Ghosh, and Sajal K. Das (2005). Towards Optimal Sensor Placement with Hypercube Cutting Planes. In: *IEEE Wireless Communications and Networking Conference (invited paper)*. New Orleans.

Patents (issued, others filed and under review)

54. **Siddhartha Chaudhuri**, Vladimir Kim, Matthew Fisher, and Sanjeev Muralikrishnan (2023). Unified Shape Representation. *US Patent* **11551038**.
55. Vladimir Kim, **Siddhartha Chaudhuri**, Noam Aigerman, Hsueh-Ti Liu, and Alec Jacobson (2022b). Subdividing a Three-Dimensional Mesh Utilizing a Neural Network. *US Patent* **11423617**.
56. Duygu Ceylan Aksit, Vladimir Kim, **Siddhartha Chaudhuri**, Radomír Měch, Noam Aigerman, Kevin Wampler, Jonathan Eisenmann, Giorgio Gori, and Emiliano Gambaretto (2022). Intuitive 3D Geometry Editing of Man-Made Shapes. *Australian Patent* **2019213451**.

57. Vladimir Kim, **Siddhartha Chaudhuri**, Noam Aigerman, Hsueh-Ti Liu, and Alec Jacobson (2022a). Decimating a Three-Dimensional Mesh via Successive Self-Parameterization. *US Patent 11257290*.
58. Duygu Ceylan Aksit, Vladimir Kim, **Siddhartha Chaudhuri**, Radomír Měch, Noam Aigerman, Kevin Wampler, Jonathan Eisenmann, Giorgio Gori, and Emiliano Gambaretto (2021). Intuitive Editing of Three-Dimensional Models. *US Patent 10957117, continuation as 11694416*.

TALKS

(since 2013, excluding conference presentations of accepted papers and internal talks)

- *Conditional Detailization*, IIT Bombay, India, 2 Nov 2022.
- *Geometric Deep Learning*, ACM India Summer School on Shape Modelling, IIIT Delhi, India, 27 Jul 2022.
- *Data-Driven 3D Modeling*, Shape Modeling International (Keynote), (fully virtual conference), 15 Nov 2021.
- *Assembly-Based Modeling: Past, Present and Future*, Toronto Geometry Colloquium (virtual talk series), 21 Apr 2021.
- *Conditional Detailization*, 3DGV Seminar (virtual talk series), 14 Apr 2021.
- *More from Less: Reducing Supervision for 3D Shape Segmentation*, CVPR Geometric Deep Learning Workshop (fully virtual conference), 19 Jun 2020.
- *Beyond the Grid: 3D Deep Learning in Irregular Domains*, Computer Vision Guest Lecture, Indian Institute of Science, India, 9 Mar 2020.
- *Deep Generative Models for 3D Shapes (and Other Irregular Domains)*, Understanding Visual Appearance Workshop, IIT Bombay, India, 4 Mar 2020.
- *Deep Generative Models of Visual Appearance*, Understanding Visual Appearance Workshop, IIT Bombay, India, 4 Mar 2020.
- *Learning to Generate 3D Structures*, NCVPRIPG (Keynote), Hubballi, India, 22 Dec 2019.
- *Recursive Neural Networks for Scene Synthesis*, CVPR 3D Scene Generation Workshop, Long Beach, USA, 16 Jun 2019.
- *Geometric and Generative Modeling Basics*, Eurographics Tutorial, Genoa, Italy (virtual talk), 6 May 2019.
- *Beyond the Grid: 3D Deep Learning in Irregular Domains*, Computer Vision Guest Lecture, Indian Institute of Science, India, 25 Mar 2019.
- *Deep Learning for 3D (and Other Irregular Domains)*, Deep Learning Workshop, IIT Bombay, India, 27 Feb 2019.
- *Variational Autoencoders and Generative Adversarial Networks*, Deep Learning Workshop, IIT Bombay, India, 26 Feb 2019.
- *Deep Recursive Models for 3D Shape Synthesis*, NVIDIA AI Workshop, Bangalore, India, 20 Feb 2019.
- *3D Design with High-Level, Data-Driven Priors*, Early Research Achiever Award Lecture, IIT Bombay, India, 29 Oct 2018.

- *SCRNN: Shape Composition with Recursive Neural Networks*, IIT Bombay, India, 14 Mar 2018.
- *More from Less: 3D Shape Analysis with Weak Supervision*, NCVPRIPG (Plenary), Mandi, India, 19 Dec 2017.
- *Learning Shape Semantics for Design*, Microsoft Research, Bangalore, India, 17 Aug 2017.
- *GRASS: Generative Recursive Autoencoders for Shape Structures*, Microsoft Research, Seattle, USA, 28 Jul 2017.
- *More from Less: 3D Shape Analysis with Weak Supervision*, Adobe Research, Seattle, USA, 27 Jul 2017.
- *GRASS: Generative Recursive Autoencoders for Shape Structures*, Microsoft Research, Bangalore, India, 3 Mar 2017.
- *GRASS: Generative Recursive Autoencoders for Shape Structures*, IIT Bombay, India, 1 Feb 2017.
- *The Semantics of Shape: Computational Methods for High-Level 3D Shape Analysis*, ICVGIP, Guwahati, India, 18 Dec 2016.
- *The Semantics of Shape: Computational Methods for High-Level 3D Shape Analysis*, IBM I-CARE, Bangalore, India, 15 Oct 2016.
- *Semantic Shape Editing*, Indian Institute of Science, Bangalore, India, 1 Aug 2016.
- *Data-Driven Design*, Qualcomm, Bangalore, India, 4 Jul 2016.
- *Semantic Shape Editing*, IIT Bombay, India, 16 Sep 2015.
- *Data-Driven Design*, SIGGRAPH Asia Courses, Shenzhen, China, 4 Dec 2014.
- *3D Modeling with Semantic Attributes*, Cornell University, Ithaca, USA, 10 Feb 2014.
- *3D Content Creation with Semantic Attributes*, IIT Bombay, India, 23 Oct 2013.
- *3D Content Creation with Semantic Attributes*, IIT Kanpur, India, 21 Oct 2013.
- *3D Content Creation with Semantic Attributes*, IIT Delhi, India, 17 Oct 2013.
- *3D Content Creation with Semantic Attributes*, Oxford University, UK, 14 Oct 2013.
- *3D Content Creation with Semantic Attributes*, University College London, UK, 7 Oct 2013.