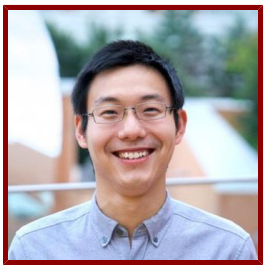
Stanford



Jiajun Wu

Assistant Professor of Computer Science and, by courtesy, of Psychology

CONTACT INFORMATION

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Bio

BIO

Jiajun Wu is an Assistant Professor of Computer Science and, by courtesy, of Psychology at Stanford University, working on computer vision, machine learning, and computational cognitive science. Before joining Stanford, he was a Visiting Faculty Researcher at Google Research. He received his PhD in Electrical Engineering and Computer Science from the Massachusetts Institute of Technology. Wu's research has been recognized through the Young Investigator Programs (YIP) by ONR and by AFOSR, the NSF CAREER award, paper awards and finalists at ICCV, CVPR, SIGGRAPH Asia, CoRL, and IROS, dissertation awards from ACM, AAAI, and MIT, the 2020 Samsung AI Researcher of the Year, and faculty research awards from J.P. Morgan, Samsung, Amazon, and Meta.

ACADEMIC APPOINTMENTS

- Assistant Professor, Computer Science
- Assistant Professor (By courtesy), Psychology
- Member, Bio-X
- Faculty Affiliate, Institute for Human-Centered Artificial Intelligence (HAI)
- Member, Wu Tsai Human Performance Alliance
- Member, Wu Tsai Neurosciences Institute

HONORS AND AWARDS

- CAREER Award, NSF (2024)
- Young Investigator Program (YIP), ONR (2024)
- Young Investigator Program (YIP), AFOSR (2023)
- Best Paper Award, SIGGRAPH Asia, ACM (2023)
- Best Systems Paper Award, CoRL (2023)
- Best Paper Award Finalist, ICCV, IEEE/CVF (2023)
- Best Paper Award Candidate, CVPR, IEEE/CVF (2023)
- Global Research Outreach (GRO) Award, Samsung (2023)

- New Faculty Highlights, AAAI (2023)
- Best Paper Award Nominee, CoRL (2022)
- Faculty Research Award, J.P. Morgan (2022)
- Forbes 30 Under 30, Science, Forbes (2022)
- Research Award, Meta (2021)
- Research Award, Amazon (2021)
- AI Researcher of the Year, Samsung (2020)
- Global Research Outreach (GRO) Award, Samsung (2020)
- George M. Sprowls PhD Thesis Award in Artificial Intelligence and Decision-Making, MIT (2020)
- Doctoral Dissertation Award Honorable Mention, ACM (2019)
- Dissertation Award, AAAI/ACM SIGAI (2019)
- PhD Fellowship, Facebook (2017--2019)
- Best Paper Award on Cognitive Robotics, IROS, IEEE/RSJ (2018)
- PhD Fellowship, Samsung (2016--2017)
- Graduate Fellowship, Nvidia (2016--2017)
- Research Fellowship, Adobe (2015)
- Edwin S. Webster Fellowship, MIT (2014)

PROGRAM AFFILIATIONS

- Symbolic Systems Program

PROFESSIONAL EDUCATION

- Ph.D., MIT , EECS (2020)
- S.M., MIT , EECS (2016)

LINKS

- Personal Site: https://jiajunwu.com/
- Google Scholar: https://scholar.google.com/citations?user=2efgcS0AAAAJ&hl=en&oi=ao
- DBLP: https://dblp.dagstuhl.de/pid/117/4768.html

Teaching

COURSES

2023-24

- Computer Graphics in the Era of AI: CS 348I (Win)
- Minds and Machines: CS 24, LINGUIST 35, PHIL 99, PSYCH 35, SYMSYS 1, SYMSYS 200 (Win)

2022-23

- Minds and Machines: CS 24, LINGUIST 35, PHIL 99, PSYCH 35, SYMSYS 1, SYMSYS 200 (Aut)

2021-22

- Computer Graphics in the Era of AI: CS 348I (Aut)
- Deep Learning for Computer Vision: CS 231N (Spr)
- Triangulating Intelligence: Melding Neuroscience, Psychology, and AI: CS 322, PSYCH 225 (Win)

2020-21

- Artificial Intelligence: Principles and Techniques: CS 221 (Win)
- Computer Graphics in the Era of AI: CS 348I (Aut)
- Computer Vision: Foundations and Applications: CS 131 (Aut)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Rastko Ciric, Agrim Gupta

Postdoctoral Faculty Sponsor

Manling Li, Weiyu Liu, Elliott Wu

Doctoral Dissertation Advisor (AC)

Michael Lingelbach

Master's Program Advisor

Brian Amaro, Aditya Bora, Emma Escandon, Emily Jin, Tarun Kumar Martheswaran, Ananjan Nandi, Nikil Ravi, Arvind Saligrama, Bhavna Sud, Jeremy Tian, Ethan Tiao, Michael Xue, Paris Zhang, Frank Zhao

Doctoral Dissertation Co-Advisor (AC)

Eric Chan, Cristobal Eyzaguirre, Michelle Guo, Kyle Hsu, Jiaman Li, Kyle Sargent, Fan-Yun Sun

Doctoral (Program)

Samuel Clarke, Chen Geng, Joy Hsu, Stephen Tian, Koven Yu, Yunzhi Zhang

Postdoctoral Research Mentor

Stefan Stojanov

Publications

PUBLICATIONS

- **Physical scene understanding** *AI MAGAZINE*
  Wu, J.
  2024
- **Neurosymbolic Models for Computer Graphics** *COMPUTER GRAPHICS FORUM*
  Ritchie, D., Guerrero, P., Jones, R., Mitra, N. J., Schulz, A., Willis, K. D., Wu, J.
  2023; 42 (2): 545-568
- **REALIMPACT: A Dataset of Impact Sound Fields for Real Objects**
  Clarke, S., Xu, J., Gao, R., Wang, J., Wang, M., James, D. L., Rau, M., Wu, J., IEEE
  IEEE COMPUTER SOC.2023: 1516-1525
- **Seeing a Rose in Five Thousand Ways**
  Zhang, Y., Wu, S., Snavely, N., Wu, J., IEEE
  IEEE COMPUTER SOC.2023: 962-971
- **OBJECTFOLDER 2.0: A Multisensory Object Dataset for Sim2Real Transfer**
  Gao, R., Si, Z., Chang, Y., Clarke, S., Bohg, J., Li Fei-Fei, Yuan, W., Wu, J., IEEE COMP SOC
  IEEE COMPUTER SOC.2022: 10588-10598
- **3D Shape Generation and Completion through Point-Voxel Diffusion**
  Zhou, L., Du, Y., Wu, J., IEEE

IEEE.2021: 5806-5815

- **Visual Dynamics: Stochastic Future Generation via Layered Cross Convolutional Networks** *IEEE TRANSACTIONS ON PATTERN ANALYSIS AND MACHINE INTELLIGENCE*
  Xue, T., Wu, J., Bouman, K. L., Freeman, W. T.
  2019; 41 (9): 2236–50
- **Learning a Probabilistic Latent Space of Object Shapes via 3D Generative-Adversarial Modeling**
  Wu, J., Zhang, C., Xue, T., Freeman, W. T., Tenenbaum, J. B., Lee, D. D., Sugiyama, M., Luxburg, U. V., Guyon, Garnett, R.
  NEURAL INFORMATION PROCESSING SYSTEMS (NIPS).2016
- **Galileo: Perceiving Physical Object Properties by Integrating a Physics Engine with Deep Learning**
  Wu, J., Yildirim, I., Lim, J. J., Freeman, W. T., Tenenbaum, J. B., Cortes, C., Lawrence, N. D., Lee, D. D., Sugiyama, M., Garnett, R.
  NEURAL INFORMATION PROCESSING SYSTEMS (NIPS).2015
- **RoboCraft: Learning to see, simulate, and shape elasto-plastic objects in 3D with graph networks** *INTERNATIONAL JOURNAL OF ROBOTICS RESEARCH*
  Shi, H., Xu, H., Huang, Z., Li, Y., Wu, J.
  2023
- **Object Motion Guided Human Motion Synthesis** *ACM TRANSACTIONS ON GRAPHICS*
  Li, J., Wu, J., Liu, C.
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- **Fluid Simulation on Neural Flow Maps** *ACM TRANSACTIONS ON GRAPHICS*
  Deng, Y., Yu, H., Zhang, D., Wu, J., Zhu, B.
  2023; 42 (6)
- **Editing Motion Graphics Video via Motion Vectorization and Transformation** *ACM TRANSACTIONS ON GRAPHICS*
  Zhang, S., Ma, J., Wu, J., Ritchie, D., Agrawala, M.
  2023; 42 (6)
- **Differentiable Physics Simulation of Dynamics-Augmented Neural Objects** *IEEE ROBOTICS AND AUTOMATION LETTERS*
  Le Cleac'h, S., Yu, H., Guo, M., Howell, T., Gao, R., Wu, J., Manchester, Z., Schwager, M.
  2023; 8 (5): 2780-2787
- **Rendering Humans from Object-Occluded Monocular Videos**
  Xiang, T., Sun, A., Wu, J., Adeli, E., Fei-Fei, L., IEEE
  IEEE COMPUTER SOC.2023: 3216-3227
- **3D Neural Field Generation using Triplane Diffusion**
  Shue, J., Chan, E., Po, R., Ankner, Z., Wu, J., Wetzstein, G., IEEE
  IEEE COMPUTER SOC.2023: 20875-20886
- **CIRCLE: Capture In Rich Contextual Environments**
  Araujo, J., Li, J., Vetrivel, K., Agarwal, R., Wu, J., Gopinath, D., Clegg, A., Liu, C., IEEE
  IEEE COMPUTER SOC.2023: 21211-21221
- **Ego-Body Pose Estimation via Ego-Head Pose Estimation**
  Li, J., Liu, C., Wu, J., IEEE
  IEEE COMPUTER SOC.2023: 17142-17151
- **Primitive Skill-based Robot Learning from Human Evaluative Feedback**
  Hiranaka, A., Hwang, M., Lee, S., Wang, C., Fei-Fei, L., Wu, J., Zhang, R., IEEE
  IEEE.2023: 7817-7824
- **STAP: Sequencing Task-Agnostic Policies**
  Agia, C., Migimatsu, T., Wu, J., Bohg, J., IEEE
  IEEE.2023: 7951-7958
- **NS3D: Neuro-Symbolic Grounding of 3D Objects and Relations**
  Hsu, J., Mao, J., Wu, J., IEEE

IEEE COMPUTER SOC.2023: 2614-2623

- **ULIP: Learning a Unified Representation of Language, Images, and Point Clouds for 3D Understanding**
  Xue, L., Gao, M., Xing, C., Martin-Martin, R., Wu, J., Xiong, C., Xu, R., Niebles, J., Savarese, S., IEEE
  IEEE COMPUTER SOC.2023: 1179-1189
- **Accidental Light Probes**
  Yu, H., Agarwala, S., Herrmann, C., Szeliski, R., Snavely, N., Wu, J., Sun, D., IEEE
  IEEE COMPUTER SOC.2023: 12521-12530
- **Multi-Object Manipulation via Object-Centric Neural Scattering Functions**
  Tian, S., Cai, Y., Yu, H., Zakharov, S., Liu, K., Gaidon, A., Li, Y., Wu, J., IEEE
  IEEE COMPUTER SOC.2023: 9021-9031
- **The OBJECTFOLDER BENCHMARK: Multisensory Learning with Neural and Real Objects**
  Gao, R., Dou, Y., Li, H., Agarwal, T., Bohg, J., Li, Y., Fei-Fei, L., Wu, J., IEEE
  IEEE COMPUTER SOC.2023: 17276-17286
- **PyPose: A Library for Robot Learning with Physics-based Optimization**
  Wang, C., Gao, D., Xu, K., Geng, J., Hu, Y., Qiu, Y., Li, B., Yang, F., Moon, B., Pandey, A., Aryan, Xu, J., Wu, T., et al
  IEEE COMPUTER SOC.2023: 22024-22034
- **Task-Driven Graph Attention for Hierarchical Relational Object Navigation**
  Lingelbach, M., Li, C., Hwang, M., Kurenkov, A., Lou, A., Martin-Martin, R., Zhang, R., Li Fei-Fei, Wu, J., IEEE
  IEEE.2023: 886-893
- **SONICVERSE: A Multisensory Simulation Platform for Embodied Household Agents that See and Hear**
  Gao, R., Li, H., Dharan, G., Wang, Z., Li, C., Xia, F., Savarese, S., Fei-Fei, L., Wu, J., IEEE
  IEEE.2023: 704-711
- **Putting People in Their Place: Affordance-Aware Human Insertion into Scenes**
  Kulal, S., Brooks, T., Aiken, A., Wu, J., Yang, J., Lu, J., Efros, A. A., Singh, K., IEEE
  IEEE COMPUTER SOC.2023: 17089-17099
- **Tree-Structured Shading Decomposition**
  Geng, C., Yu, H., Zhang, S., Agrawala, M., Wu, J., IEEE
  IEEE COMPUTER SOC.2023: 488-498
- **VQ3D: Learning a 3D-Aware Generative Model on ImageNet**
  Sargent, K., Koh, J., Zhang, H., Chang, H., Herrmann, C., Srinivasan, P., Wu, J., Sun, D., IEEE
  IEEE COMPUTER SOC.2023: 4217-4227
- **RoboCraft: Learning to See, Simulate, and Shape Elasto-Plastic Objects with Graph Networks**
  Shi, H., Xu, H., Huang, Z., Li, Y., Wu, J., Hauser, K., Shell, D., Huang, S.
  RSS FOUNDATION-ROBOTICS SCIENCE & SYSTEMS FOUNDATION.2022
- **Unsupervised Segmentation in Real-World Images via Spelke Object Inference**
  Chen, H., Venkatesh, R., Friedman, Y., Wu, J., Tenenbaum, J. B., Yamins, D. K., Bear, D. M., Avidan, S., Brostow, G., Cisse, M., Farinella, G. M., Hassner, T.
  SPRINGER INTERNATIONAL PUBLISHING AG.2022: 719-735
- **Rotationally Equivariant 3D Object Detection**
  Yu, H., Wu, J., Yi, L., IEEE COMP SOC
  IEEE COMPUTER SOC.2022: 1446-1454
- **Revisiting the "Video" in Video-Language Understanding**
  Buch, S., Eyzaguirre, C., Gaidon, A., Wu, J., Li Fei-Fei, Niebles, J., IEEE COMP SOC
  IEEE COMPUTER SOC.2022: 2907-2917
- **Translating a Visual LEGO Manual to a Machine-Executable Plan**
  Wang, R., Zhang, Y., Mao, J., Cheng, C., Wu, J., Avidan, S., Brostow, G., Cisse, M., Farinella, G. M., Hassner, T.

SPRINGER INTERNATIONAL PUBLISHING AG.2022: 677-694

- **Video Extrapolation in Space and Time**
  Zhang, Y., Wu, J., Avidan, S., Brostow, G., Cisse, M., Farinella, G. M., Hassner, T.
  SPRINGER INTERNATIONAL PUBLISHING AG.2022: 313-333
- **Scene Synthesis from Human Motion**
  Ye, S., Wang, Y., Li, J., Park, D., Liu, C., Xu, H., Wu, J., Spencer, S. N.
  ASSOC COMPUTING MACHINERY.2022
- **Programmatic Concept Learning for Human Motion Description and Synthesis**
  Kulal, S., Mao, J., Aiken, A., Wu, J., IEEE COMP SOC
  IEEE COMPUTER SOC.2022: 13833-13842
- **Hierarchical Motion Understanding via Motion Programs**
  Kulal, S., Mao, J., Aiken, A., Wu, J., IEEE COMP SOC
  IEEE COMPUTER SOC.2021: 6564-6572
- **Neural Radiance Flow for 4D View Synthesis and Video Processing**
  Du, Y., Zhang, Y., Yu, H., Tenenbaum, J. B., Wu, J., IEEE
  IEEE.2021: 14304-14314
- **Learning Temporal Dynamics from Cycles in Narrated Video**
  Epstein, D., Wu, J., Schmid, C., Sun, C., IEEE
  IEEE.2021: 1460-1469
- **Augmenting Policy Learning with Routines Discovered from a Single Demonstration**
  Zhao, Z., Gan, C., Wu, J., Guo, X., Tenenbaum, J., Assoc Advancement Artificial Intelligence
  ASSOC ADVANCEMENT ARTIFICIAL INTELLIGENCE.2021: 11024-11032
- **KeypointDeformer: Unsupervised 3D Keypoint Discovery for Shape Control**
  Jakab, T., Tucker, R., Makadia, A., Wu, J., Snavely, N., Kanazawa, A., IEEE COMP SOC
  IEEE COMPUTER SOC.2021: 12778-12787
- **De-rendering the World's Revolutionary Artefacts**
  Wu, S., Makadia, A., Wu, J., Snavely, N., Tucker, R., Kanazawa, A., IEEE COMP SOC
  IEEE COMPUTER SOC.2021: 6334-6343
- **pi-GAN: Periodic Implicit Generative Adversarial Networks for 3D-Aware Image Synthesis**
  Chan, E. R., Monteiro, M., Kellnhofer, P., Wu, J., Wetzstein, G., IEEE COMP SOC
  IEEE COMPUTER SOC.2021: 5795-5805
- **Repopulating Street Scenes**
  Wang, Y., Liu, A., Tucker, R., Wu, J., Curless, B. L., Seitz, S. M., Snavely, N., IEEE COMP SOC
  IEEE COMPUTER SOC.2021: 5106-5115
- **Learning Generative Models of 3D Structures**
  Chaudhuri, S., Ritchie, D., Wu, J., Xu, K., Zhang, H.
  WILEY.2020: 643–66
- **End-to-End Optimization of Scene Layout**
  Luo, A., Zhang, Z., Wu, J., Tenenbaum, J. B., IEEE
  IEEE.2020: 3753–62
- **DualSMC: Tunneling Differentiable Filtering and Planning under Continuous POMDPs**
  Wang, Y., Liu, B., Wu, J., Zhu, Y., Du, S. S., Li Fei-Fei, Tenenbaum, J. B., Bessiere, C.
  IJCAI-INT JOINT CONF ARTIF INTELL.2020: 4190-4198
- **Accurate Vision-based Manipulation through Contact Reasoning**
  Kloss, A., Bauza, M., Wu, J., Tenenbaum, J. B., Rodriguez, A., Bohg, J., IEEE

IEEE.2020: 6738-6744

- **Visual Grounding of Learned Physical Models**
  Li, Y., Lin, T., Yi, K., Bear, D. M., Yamins, D. K., Wu, J., Tenenbaum, J. B., Torralba, A., Daume, H., Singh, A.
  JMLR-JOURNAL MACHINE LEARNING RESEARCH.2020

- **Perspective Plane Program Induction from a Single Image**
  Li, Y., Mao, J., Zhang, X., Freeman, W. T., Tenenbaum, J. B., Wu, J., IEEE
  IEEE.2020: 4433–42

- **Video Enhancement with Task-Oriented Flow** *INTERNATIONAL JOURNAL OF COMPUTER VISION*
  Xue, T., Chen, B., Wu, J., Wei, D., Freeman, W. T.
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- **An integrative computational architecture for object-driven cortex** *CURRENT OPINION IN NEUROBIOLOGY*
  Yildirim, I., Wu, J., Kanwisher, N., Tenenbaum, J.
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- **See, feel, act: Hierarchical learning for complex manipulation skills with multisensory fusion** *SCIENCE ROBOTICS*
  Fazeli, N., Oller, M., Wu, J., Wu, Z., Tenenbaum, J. B., Rodriguez, A.
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- **Visual Concept-Metaconcept Learning**
  Han, C., Mao, J., Gan, C., Tenenbaum, J. B., Wu, J., Wallach, H., Larochelle, H., Beygelzimer, A., d'Alche-Buc, F., Fox, E., Garnett, R.
  NEURAL INFORMATION PROCESSING SYSTEMS (NIPS).2019

- **Combining Physical Simulators and Object-Based Networks for Control**
  Ajay, A., Bauza, M., Wu, J., Fazeli, N., Tenenbaum, J. B., Rodriguez, A., Kaelbling, L. P., IEEE, Howard, A., Althoefer, K., Arai, F., Arrichiello, F., Caputo, B., et al
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- **Propagation Networks for Model-Based Control Under Partial Observation**
  Li, Y., Wu, J., Zhu, J., Tenenbaum, J. B., Torralba, A., Tedrake, R., IEEE, Howard, A., Althoefer, K., Arai, F., Arrichiello, F., Caputo, B., Castellanos, J., et al
  IEEE.2019: 1205–11

- **ChainQueen: A Real-Time Differentiable Physical Simulator for Soft Robotics**
  Hu, Y., Liu, J., Spielberg, A., Tenenbaum, J. B., Freeman, W. T., Wu, J., Rus, D., Matusik, W., IEEE, Howard, A., Althoefer, K., Arai, F., Arrichiello, F., et al
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- **Program-Guided Image Manipulators**
  Mao, J., Zhang, X., Li, Y., Freeman, W. T., Tenenbaum, J. B., Wu, J., IEEE
  IEEE COMPUTER SOC.2019: 4029–38

- **Modeling Expectation Violation in Intuitive Physics with Coarse Probabilistic Object Representations**
  Smith, K. A., Mei, L., Yao, S., Wu, J., Spelke, E., Tenenbaum, J. B., Ullman, T. D., Wallach, H., Larochelle, H., Beygelzimer, A., d'Alche-Buc, F., Fox, E., Garnett, et al
  NEURAL INFORMATION PROCESSING SYSTEMS (NIPS).2019

- **Learning Sight from Sound: Ambient Sound Provides Supervision for Visual Learning** *INTERNATIONAL JOURNAL OF COMPUTER VISION*
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- **3D Interpreter Networks for Viewer-Centered Wireframe Modeling** *INTERNATIONAL JOURNAL OF COMPUTER VISION*
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- **Augmenting Physical Simulators with Stochastic Neural Networks: Case Study of Planar Pushing and Bouncing**
  Ajay, A., Wu, J., Fazeli, N., Bauza, M., Kaelbling, L. P., Tenenbaum, J. B., Rodriguez, A., Kosecka, J., Maciejewski, A. A., Okamura, A., Bicchi, A., Stachniss, C., Song, et al
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- **Unsupervised Learning of Latent Physical Properties Using Perception-Prediction Networks**
  Zheng, D., Luo, V., Wu, J., Tenenbaum, J. B., Globerson, A., Silva, R.
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- **Physical Primitive Decomposition**
  Liu, Z., Freeman, W. T., Tenenbaum, J. B., Wu, J., Ferrari, Hebert, M., Sminchisescu, C., Weiss, Y.
  SPRINGER INTERNATIONAL PUBLISHING AG.2018: 3–20
- **Seeing Tree Structure from Vibration**
  Xue, T., Wu, J., Zhang, Z., Zhang, C., Tenenbaum, J. B., Freeman, W. T., Ferrari, Hebert, M., Sminchisescu, C., Weiss, Y.
  SPRINGER INTERNATIONAL PUBLISHING AG.2018: 762–79
- **MoSculp: Interactive Visualization of Shape and Time**
  Zhang, X., Dekel, T., Xue, T., Owens, A., He, Q., Wu, J., Mueller, S., Freeman, W. T., Assoc Comp Machinery
  ASSOC COMPUTING MACHINERY.2018: 275–85
- **Learning to Reconstruct Shapes from Unseen Classes**
  Zhang, X., Zhang, Z., Zhang, C., Tenenbaum, J. B., Freeman, W. T., Wu, J., Bengio, S., Wallach, H., Larochelle, H., Grauman, K., CesaBianchi, N., Garnett, R.
  NEURAL INFORMATION PROCESSING SYSTEMS (NIPS).2018
- **Attention Clusters: Purely Attention Based Local Feature Integration for Video Classification**
  Long, X., Gan, C., de Melo, G., Wu, J., Liu, X., Wen, S., IEEE
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- **Pix3D: Dataset and Methods for Single-Image 3D Shape Modeling**
  Sun, X., Wu, J., Zhang, X., Zhang, Z., Zhang, C., Xue, T., Tenenbaum, J. B., Freeman, W. T., IEEE
  IEEE.2018: 2974–83
- **3D Shape Perception from Monocular Vision, Touch, and Shape Priors**
  Wang, S., Wu, J., Sun, X., Yuan, W., Freeman, W. T., Tenenbaum, J. B., Adelson, E. H., Kosecka, J., Maciejewski, A. A., Okamura, A., Bicchi, A., Stachniss, C., Song, et al
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- **3D-Aware Scene Manipulation via Inverse Graphics**
  Yao, S., Hsu, T., Zhu, J., Wu, J., Torralba, A., Freeman, W. T., Tenenbaum, J. B., Bengio, S., Wallach, H., Larochelle, H., Grauman, K., CesaBianchi, N., Garnett, et al
  NEURAL INFORMATION PROCESSING SYSTEMS (NIPS).2018
- **Visual Object Networks: Image Generation with Disentangled 3D Representation**
  Zhu, J., Zhang, Z., Zhang, C., Wu, J., Torralba, A., Tenenbaum, J. B., Freeman, W. T., Bengio, S., Wallach, H., Larochelle, H., Grauman, K., CesaBianchi, N., Garnett, et al
  NEURAL INFORMATION PROCESSING SYSTEMS (NIPS).2018
- **Learning to Exploit Stability for 3D Scene Parsing**
  Du, Y., Liu, Z., Basevi, H., Leonardis, A., Freeman, W. T., Tenenbaum, J. B., Wu, J., Bengio, S., Wallach, H., Larochelle, H., Grauman, K., CesaBianchi, N., Garnett, et al
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- **Neural-Symbolic VQA: Disentangling Reasoning from Vision and Language Understanding**
  Yi, K., Wu, J., Gan, C., Torralba, A., Kohli, P., Tenenbaum, J. B., Bengio, S., Wallach, H., Larochelle, H., Grauman, K., CesaBianchi, N., Garnett, R.
  NEURAL INFORMATION PROCESSING SYSTEMS (NIPS).2018
- **Learning to See Physics via Visual De-animation**
  Wu, J., Lu, E., Kohli, P., Freeman, W. T., Tenenbaum, J. B., Guyon, Luxburg, U. V., Bengio, S., Wallach, H., Fergus, R., Vishwanathan, S., Garnett, R.
  NEURAL INFORMATION PROCESSING SYSTEMS (NIPS).2017
- **MarrNet: 3D Shape Reconstruction via 2.5D Sketches**
  Wu, J., Wang, Y., Xue, T., Sun, X., Freeman, W. T., Tenenbaum, J. B., Guyon, Luxburg, U. V., Bengio, S., Wallach, H., Fergus, R., Vishwanathan, S., Garnett, R.
  NEURAL INFORMATION PROCESSING SYSTEMS (NIPS).2017

- **Synthesizing 3D Shapes via Modeling Multi-View Depth Maps and Silhouettes with Deep Generative Networks**
  Soltani, A., Huang, H., Wu, J., Kulkarni, T. D., Tenenbaum, J. B., IEEE
  IEEE.2017: 2511–19
- **Neural Scene De-rendering**
  Wu, J., Tenenbaum, J. B., Kohli, P., IEEE
  IEEE.2017: 7035–43
- **Raster-to-Vector: Revisiting Floorplan Transformation**
  Liu, C., Wu, J., Kohli, P., Furukawa, Y., IEEE
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- **Generative Modeling of Audible Shapes for Object Perception**
  Zhang, Z., Wu, J., Li, Q., Huang, Z., Traer, J., McDermott, J. H., Tenenbaum, J. B., Freeman, W. T., IEEE
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- **Shape and Material from Sound**
  Zhang, Z., Li, Q., Huang, Z., Wu, J., Tenenbaum, J. B., Freeman, W. T., Guyon, Luxburg, U. V., Bengio, S., Wallach, H., Fergus, R., Vishwanathan, S., Garnett, R.
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- **Self-Supervised Intrinsic Image Decomposition**
  Janner, M., Wu, J., Kulkarni, T. D., Yildirim, I., Tenenbaum, J. B., Guyon, Luxburg, U. V., Bengio, S., Wallach, H., Fergus, R., Vishwanathan, S., Garnett, R.
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