Devi Parikh

Curriculum Vitae

EDUCATION

CARNEGIE MELLON UNIVERSITY Pittsburgh, PA
Ph.D., Electrical and Computer Engineering, 2009

CARNEGIE MELLON UNIVERSITY Pittsburgh, PA
MS, Electrical and Computer Engineering, 2007

ROWAN UNIVERSITY Glassboro, NJ
B.S. Electrical and Computer Engineering, Minor: Computer Science, 2005

RESEARCH INTERESTS

Generative AI, AI for Creativity
Multimodal AI, Computer Vision, Natural Language Processing
Human-Machine Collaboration

APPOINTMENTS

SOMETHING NEW™ March 2024 – current

GENERATIVE AI, META August 2023 – March, 2024
Senior Director Menlo Park, CA

GENERATIVE AI, META March 2023 – July 2023
Research Director Menlo Park, CA

FUNDAMENTAL AI RESEARCH (FAIR), META August 2021 – March 2023
Research Director Menlo Park, CA

GEORGIA TECH August 2019 – July 2024
Associate Professor Atlanta, GA

FACEBOOK AI RESEARCH (FAIR) July 2017 – August 2021
Research Scientist Menlo Park, CA

GEORGIA TECH August 2016 – August 2019
Assistant Professor Atlanta, GA

FACEBOOK AI RESEARCH (FAIR) August 2016 – July 2017
Visiting Researcher Menlo Park, CA

VIRGINIA TECH January 2013 – August 2016
Assistant Professor Blacksburg, VA

MICROSOFT RESEARCH Summer 2015
Visiting Researcher Redmond, WA

TOYOTA TECHNOLOGICAL INSTITUTE (TTIC) August 2009 – December 2012
Research Assistant Professor Chicago, IL

CARNEGIE MELLON UNIVERSITY Summer 2012
Visiting Research Assistant Professor Pittsburgh, PA

MASSACHUSETTS INSTITUTE OF TECHNOLOGY (MIT) Spring 2011
Visiting Scientist Cambridge, MA

UNIVERSITY OF TEXAS AT AUSTIN Summer 2010
Visiting Researcher Austin, TX

MICROSOFT RESEARCH Summer 2010
Visiting Researcher Redmond, WA

CARNEGIE MELLON UNIVERSITY Fall 2005 – Summer 2009
Research Assistant Pittsburgh, PA

MICROSOFT RESEARCH Summer 2007, Summer 2008
Research Intern Redmond, WA

INTEL RESEARCH LABORATORY Summer 2006
Research Intern Pittsburgh, PA

ROWAN UNIVERSITY Fall 2003 – Spring 2005
Research Assistant Glassboro, NJ

AWARDS AND HONORS

- Lockheed Martin Inspirational Young Faculty Award (Georgia Tech), 2019
- Sigma XI Young Faculty Award (Georgia Tech), 2018
- Forbes' list of 20 "Incredible Women Advancing A.I. Research"
- IJCAI Computers and Thought Award, 2017
- Google Faculty Research Award, 2016
- Amazon Academic Research Award, 2016
- Rowan University's 40 Under 40, 2016
- Rowan University Medal of Excellence for Alumni Achievement, 2016
- Office of Naval Research (ONR) Young Investigator Program (YIP) award, 2016.
- Sloan Research Fellowship, 2016
- National Science Foundation (NSF) Faculty Early Career Development (CAREER) award, 2016

- Google Faculty Research Award, 2015
- Outstanding New Assistant Professor, College of Engineering, Virginia Tech, 2015
- Allen Distinguished Investigator in Artificial Intelligence, 2014
- Google Faculty Research Award, 2014
- Outstanding Reviewer Award, 2014
  European Conference on Computer Vision (ECCV)
- Army Research Office (ARO) Young Investigator Program (YIP) Award, 2014
- Thank-a-teacher, 2014, 2015
  Virginia Tech Center for Instructional Development and Education Research (CIDER)
- Google Faculty Research Award, 2012
- Outstanding Reviewer Award, 2012
  IEEE Conference on Computer Vision and Pattern Recognition (CVPR)
- David Marr (Best Paper) Prize, 2011
  International Conference on Computer Vision (ICCV)
- Best Poster Award, 2011
  Fine Grained Visual Categorization (FGVC) Workshop
  IEEE Conference on Computer Vision and Pattern Recognition (CVPR)
- Graduate Research Fellowship, 2006-2009
  National Science Foundation (NSF)
- Best Paper Award, 2007
  Beyond Patches workshop
  IEEE Conference on Computer Vision and Pattern Recognition (CVPR)
- Best Presentation Award, 2007
  Course on Learning-based Methods in Vision
  Carnegie Mellon University
- Golden Key National Honor Society, 2004, 2005
- New Jersey Epsilon Honor Society, 2004, 2005
- Meritorious Award, 2003, 2004, 2005
  International Interdisciplinary/Mathematical Contest in Modeling
- Certificate of Achievement in Mathematics, 2004
  Rowan University
- Broome Alumni Undergraduate Scholarship, 2003, 2004
  Rowan University
- Academic Scholarship, 2003-2004
  Professional Engineering Society of South Jersey

- Academic Scholarship, 2003-2004
  National Science Foundation (NSF)

- Hazel P. Valiant Student Scholarship, 2002
  Rowan University

- Research Experience for Undergraduates, Summer 2002
  National Science Foundation (NSF)

ACADEMIC FUNDING

- Samsung Global Research Outreach (GRO) Program, "Leveraging Explanations to Improve VQA Models Through Focused Feedback"

- Siemens Research Grant, "Learning Visual Curiosity"

- Amazon AWS Machine Learning Research Award, "Towards AI Agents that can See, Talk, and Act"

- Gift from Facebook

- DARPA XAI (Explainable AI), "EQUAS – Explainable QUestion Answering System"

- Google Faculty Research Award, "Making the V in VQA Matter: Elevating the Role of Image Understanding in Visual Question Answering"

- Amazon Academic Research Award (AARA), "Counting Everyday Objects in Everyday Scenes"

- Office of Naval Research (ONR) Young Investigator Program (YIP) award, "Visual Question Answering (VQA)"

- National Science Foundation (NSF) Faculty Early Career Development (CAREER) award, "Visual Question Answering (VQA)"

- Alfred P. Sloan Foundation, "Words, Pictures, and Common Sense"

- National Science Foundation Research Traineeship Program (NRT), "UrbComp: Data Science for Modeling, Understanding, and Advancing Urban Populations"

- Army Research Lab, "Answering Binary Questions about Images"

- Army Research Lab, "Performance Evaluation and Input Quality Assessment"

- Institute for Critical Technology and Applied Science (ICTAS), Virginia Tech, "Visual Question Answering (VQA)"

- Google Faculty Research Award, "Visual Question Answering (VQA)"

- Paul G. Allen Family Foundation, "Learning Common Sense via Visual Abstractions"

- Google Faculty Research Award, "Learning from Visual Abstractions"

- Army Research Office (ARO) Young Investigator Program (YIP), “Semantic Characterization of Failures and Beliefs of Machine Perception Systems”
- Gift from Microsoft
- Google Faculty Research Award, “Relative Attributes-based Feedback for Image Search”
- National Science Foundation, “Debugging Machine Visual Recognition via Humans in the Loop”

TEACHING

- Instructor: Computer Vision (Georgia Tech)
  Fall 2020, Instructor rating: 4.0/5.00
- Instructor: Computer Vision (Georgia Tech)
  Fall 2019, Instructor rating: 4.6/5.00
- Instructor: Computer Vision (Georgia Tech)
  Fall 2018, Instructor rating: 4.6/5.00
- Instructor: Vision and Language (Georgia Tech)
  Fall 2017, Instructor rating: 4.8/5.00
- Instructor: Graduate Level Advanced Topics in Computer Vision (Virginia Tech)
  Spring 2016, Instructor rating: 5.83/6.00
  Spring 2014, Instructor rating: 5.62/6.00
  Spring 2013, Instructor rating: 5.86/6.00
  (Department average for courses at same level: 5.16/6.00)
- Instructor: Undergraduate Level Introduction to Computer Engineering (Virginia Tech)
  Spring 2015, Instructor rating: 5.28/6.00
  Fall 2014, Instructor rating: 5.32/6.00
  (Department average for courses at same level: 4.65/6.00)
- Instructor: Undergraduate Level Introduction to Computer Vision (Virginia Tech)
  Fall 2015, Instructor rating: 5.50/6.00
- Instructor: Graduate Level Computer Vision (Virginia Tech)
  Fall 2015, Instructor rating: 5.52/6.00
  Fall 2013, Instructor rating: 5.40/6.00
  (Department average for courses at same level: 5.01/6.00)
- Guest Lecturer: Undergraduate Level Introduction to Computer Vision (TTIC), Spring 2010
- Teaching Assistant: Graduate Level Image, Video and Multimedia (CMU), Spring 2008
- Teaching Assistant: Undergraduate Level Signals and Systems (CMU), Fall 2007

PUBLICATIONS

Books

1. R. Feris, C. Lampert, and D. Parikh (Editors). Visual Attributes. Springer, Advances in Computer Vision and Pattern Recognition Series, 2017.

2. D. Batra, A. Kowdle, D. Parikh, J. Luo and T. Chen. Interactive Co-segmentation of Objects in Image Collections. SpringerBriefs in Computer Science, 2011.

Theses

3. D. Parikh. Modeling Context for Image Understanding: When, For What, and How? Ph.D. Thesis. Carnegie Mellon University, August, 2009.

Journal Articles

4. L. Chanussot*, A. Das*, S. Goyal*, T. Lavril*, M. Shuaibi*, M. Riviére, K. Tran, J. Heras-Domingo, C. Ho, W. Hu, A. Palizhati, A. Sriram, B. Wood, J. Yoon, D. Parikh, C. L. Zitnick, Z. Ulissi. * equal contribution. The Open Catalyst 2020 (OC20) Dataset and Community Challenges. *ACS Catalysis*, 2021.

5. R. R. Selvaraju, A. Das, R. Vedantam, M. Cogswell, D. Parikh, and D. Batra. Grad-CAM: Visual Explanations from Deep Networks via Gradient-based Localization. *International Journal on Computer Vision (IJCV)*, 2019.

6. Y. Goyal, T. Khot, A. Agrawal, D. Summers-Stay, D. Batra, and D. Parikh. Making the V in VQA Matter: Elevating the Role of Image Understanding in Visual Question Answering. *International Journal of Computer Vision (IJCV)*, 2018.

7. A. Das, S. Kottur, K. Gupta, A. Singh, D. Yadav, J. Moura, D. Parikh, and D. Batra. Visual Dialog. *IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI)*, 2018.

8. A. Das, H. Agrawal, C. L. Zitnick. D. Parikh, and D. Batra. Human Attention in Visual Question Answering: Do Humans and Deep Networks Look at the Same Regions? *Computer Vision and Image Understanding (CVIU)*, 2017.

9. A. Agrawal*, J. Lu*, S. Antol*, M. Mitchell, C. L. Zitnick, D. Parikh, and D. Batra. VQA: Visual Question Answering. *joint first authors. *Special Issue on Combined Image and Language Understanding, International Journal of Computer Vision (IJCV)*, 2017

10. C. L. Zitnick, A. Agrawal, S. Antol, M. Mitchell, D. Batra, and D. Parikh. Measuring Machine Intelligence Through Visual Question Answering. *AI Magazine,* (2016)

11. R. Mottaghi, S. Fidler, A. Yuille, R. Urtasun and D. Parikh. Human-Machine CRFs for Identifying Bottlenecks in Scene Understanding. *IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI)*, 2016.

12. C. L. Zitnick, R. Vedantam and D. Parikh. Adopting Abstract Images for Semantic Scene Understanding. *Special Issue on the best papers at the 2013 IEEE Conference on Computer Vision and Pattern Recognition (CVPR), IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI)*, 2016.

13. A. Kovashka, D. Parikh and K. Grauman. WhittleSearch: Interactive Image Search with Relative Attribute Feedback. *International Journal of Computer Vision (IJCV)*, 2015.

14. P. Isola, D. Parikh, J. Xiao, A. Torralba and A. Oliva. What Makes a Photograph Memorable? *IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI),* 2014.

15. D. Parikh, C. L. Zitnick and T. Chen. Exploring Tiny Images: The Roles of Appearance and Contextual Information for Machine and Human Object Recognition. *IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI),* 2012.

16. D. Batra, A. Kowdle, D. Parikh, J. Luo and T. Chen. Interactively Co-segmenting Topically Related Images with Intelligent Scribble Guidance. *International Journal of Computer Vision (IJCV)*, January 2011.

17. D. Parikh and T. Chen. Unsupervised Modeling of Objects and their Hierarchical Contextual Interactions. *EURASIP Journals on Image and Video Processing, Special Issue on Patches in Vision, 2009.*

18. D. Parikh and T. Chen. Data Fusion and Cost Minimization for Intrusion Detection. IEEE Transactions on Information Forensics and Security, *Special Issue on Statistical Methods in Network Security and Forensics, 2008.*

19. R. Polikar, A. Topalis, D. Parikh, D. Green, J. Kounios, and C. Clark. An Ensemble Based Data Fusion Approach for Early Diagnosis of Alzheimer's Disease. *Information Fusion, Special Issue on Applications of Ensemble Methods*, January 2008.

20. D. Parikh, and R. Polikar. An Ensemble Based Incremental Learning Approach to Data Fusion. *IEEE Transactions on Systems, Man and Cybernetics,* April 2007.

21. Y. Mehta, K. Jahan, J. Laicovsky, L. Miller, D. Parikh, and A. Lozano. Evaluate the Effect of Coarse and Fine Rubber Particles on Laboratory Rutting Performance of Asphalt Concrete Mixtures. *The Journal of Solid Waste Technology And Management*, 2005.

Peer Reviewed Conference Papers (acceptance rates typically 3%~25%)

22. U. Singer*, A. Zohar*, Y. Kirstain, S. Sheynin, A. Polyak, D. Parikh, Y. Taigman. * equal contribution. Video Editing via Factorized Diffusion Distillation (a.k.a, Emu Video Edit). *European Conference on Computer Vision (ECCV)*, 2024.
23. R. Girdhar*^, M. Singh*^, A. Brown*, Q. Duval*, S. Azadi*, S. Rambhatla, A. Shah, X. Yin, D. Parikh, I. Misra. * equal first authors ^ equal technical contributions. Emu Video: Factorizing Text-to-Video Generation by Explicit Image Conditioning. *European Conference on Computer Vision (ECCV)*, 2024.
24. S. Sheynin*, A. Polyak*, U. Singer*, Y. Kirstain*, A. Zohar*, O. Ashual, D. Parikh, Y. Taigman. * equal contribution. Emu Edit: Precise Image Editing via Recognition and Generation Tasks. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2024.
25. S. Azadi*, T. Hayes*, A. Shah, G. Pang, D. Parikh, and S. Gupta. * equal contribution. Text-Conditional Contextualized Avatars For Zero-Shot Personalization. *International Conference on Computer Vision (ICCV)*, 2023.
26. U. Singer*, S. Sheynin*, A. Polyak*, O. Ashual, I Makarov, F. Kokkinos, N. Goyal, A. Vedaldi, D. Parikh, J. Johnson, and Y. Taigman. * equal contribution. Text-To-4D Dynamic Scene Generation. *International Conference on Machine Learning (ICML)*, 2023.

27. O. Avrahami, T. Hayes, O. Gafni, S. Gupta, Y. Taigman, D. Parikh, D. Lischinski, O. Fried, and X. Yin. SpaText: Spatio-Textual Representation for Controllable Image Generation. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2023.

28. U. Singer*, A. Polyak*, T. Hayes*, X. Yin*, J. An, S. Zhang, Q. Hu, H. Yang, O. Ashual, O. Gafni, D. Parikh*, S. Gupta*, and Y. Taigman*. * core contributors. Make-A-Video: Text-to-Video Generation without Text-Video Data. *International Conference on Learning Representations (ICLR),* 2023.

29. F. Kreuk, G. Synnaeve, A. Polyak, U. Singer, A. Défossez1, J. Copet, D. Parikh, Y. Taigman, and Y. Adi. AudioGen: Textually Guided Audio Generation. *International Conference on Learning Representations (ICLR),* 2023.

30. T. Hayes*, S. Zhang*, X. Yin, G. Pang, S. Sheng, H. Yang, S. Ge, Q. Hu, and D. Parikh. * equal contribution. MUGEN: A Playground for Video-Audio-Text Multimodal Understanding and GENeration. *European Conference on Computer Vision (ECCV),* 2022

31. O. Gafni, A. Polyak, O. Ashual, S. Sheynin, D. Parikh, and Y. Taigman. Make-A-Scene: Scene-Based Text-to-Image Generation with Human Priors. *European Conference on Computer Vision (ECCV)*, 2022.

32. S. Ge, T. Hayes, H. Yang, X. Yin, G. Pang, D. Jacobs, J. Huang, and D. Parikh. Long Video Generation with Time-Agnostic VQGAN and Time-Sensitive Transformer. *European Conference on Computer Vision (ECCV)*, 2022.

33. S. Datta, S. Dharur, V. Cartillier, R. Desai, D. Batra, and D. Parikh. Episodic Memory Question Answering. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR),* 2022. **(Oral)**

34. A. Shrivastava, K. Gopalakrishnan, Y. Liu, R. Piramuthu, G. Tür, D. Parikh, and D. Hakkani-Tür. VISITRON: Visual Semantics-Aligned Interactively Trained Object-Navigator. *Findings of the Annual Meeting of the Association for Computational Linguistics (ACL),* 2022

35. S. Sheng*, A. Singh*, V. Goswami, J. A. L. Magana, W. Galuba, D. Parikh, and D. Kiela. * equal contribution. Human-Adversarial Visual Question Answering. *Neural Information Processing Systems (NeurIPS)*, 2021

36. S. Ge and D. Parikh. Visual Conceptual Blending with Large-scale Language and Vision Models. *International Conference on Computational Creativity (ICCC)*, 2021. **(Oral)**

37. Y. Kant, A. Moudgil, D. Batra, D. Parikh, and H. Agrawal. Contrast and Classify: Alternate Training for Robust VQA. *International Conference on Computer Vision (ICCV)*, 2021

38. S. Dharur, P. Tendulkar, D. Batra, D. Parikh, and R. R. Selvaraju. SOrT-ing in VQA: Contrastive Gradient Learning for Improved Consistency. *Conference of the North American Chapter of the Association for Computational Linguistics (NAACL)*, 2021.

39. K. Marino, X. Chen, D. Parikh, A. Gupta, and M. Rohrbach. KRISP: Integrating Implicit and Symbolic Knowledge for Open-Domain Knowledge-Based VQA. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR),* 2021.

40. X. Lin, G. Bertasius, J. Wang, S. Chang, D. Parikh, and L. Torresani. VX2TEXT: End-to-End Learning of Video-Based Text Generation From Multimodal Inputs. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR),* 2021.

41. S. Ge, V. Goswami, C. L. Zitnick, and D. Parikh. Creative Sketch Generation. *International Conference on Learning Representations (ICLR),* 2021.

42. S. Datta, O. Maksymets, J. Hoffman, S. Lee, D. Batra, and D. Parikh. Integrating Egocentric Localization for More Realistic Point-Goal Navigation Agents. *Conference on Robot Learning (CoRL)*, 2020

43. P. Anderson, A. Shrivastava, J. Truong, A. Majumdar, D. Parikh, D. Batra, and S. Lee. Sim-to-Real Transfer for Vision-and-Language Navigation. *Conference on Robot Learning (CoRL),* 2020

44. M. Cogswell*, J. Lu*, R. Jain, S. Lee, D. Batra, and D. Parikh. * equal contribution. Dialog without Dialog: Learning Image-Discriminative Dialog Policies from Single-Shot Question Answering Data. *Neural Information Processing Systems (NeurIPS),* 2020.

45. M. Hahn, J. Krantz, D. Batra, D. Parikh, J. Rehg, S. Lee, P. Anderson. Where Are You? Localization from Embodied Dialog. *Conference on Empirical Methods in Natural Language Processing (EMNLP)*, 2020.

46. A. Majumdar, A. Shrivastava, S. Lee, P. Anderson, D. Parikh, and D. Batra. Improving Vision-and-Language Navigation with Image-Text Pairs from the Web. *European Conference on Computer Vision (ECCV)*, 2020. **(Spotlight)**

47. V. Murahari, D. Batra, D. Parikh, and A. Das. Large-scale Pretraining for Visual Dialog: A Simple State-of-the-Art Baseline. *European Conference on Computer Vision (ECCV)*, 2020.

48. M. Narasimhan, E. Wijmans, X. Chen, T. Darrell, D. Batra, D. Parikh, A. Singh. Seeing the Un-Scene: Learning Amodal Semantic Maps for Room Navigation. *European Conference on Computer Vision (ECCV)*, 2020.

49. Y. Kant, D. Batra, P. Anderson, A. Schwing, D. Parikh, J. Lu, H. Agrawal. Spatially Aware Multimodal Transformers for TextVQA. *European Conference on Computer Vision (ECCV)*, 2020.

50. P. Tendulkar, A. Das, A. Kembhavi, and D. Parikh. Feel The Music: Automatically Generating A Dance For An Input Song. *International Conference on Computational Creativity (ICCC)*, 2020. **(Oral)**

51. D. Parikh and C. L. Zitnick. Exploring Crowd Co-creation Scenarios for Sketches. *International Conference on Computational Creativity (ICCC)*, 2020.

52. G. Aggarwal and D. Parikh. Neuro-Symbolic Generative Art: A Preliminary Study. *International Conference on Computational Creativity (ICCC)*, 2020.

53. X. Li and D. Parikh. Lemotif: An Affective Visual Journal Using Deep Neural Networks. *International Conference on Computational Creativity (ICCC)*, 2020. **(Oral)**

54. D. Parikh. Predicting A Creator's Preferences In, and From, Interactive Generative Art. *International Conference on Computational Creativity (ICCC)*, 2020.

55. N. Modhe, P. Chattopadhyay, M. Sharma, A. Das, D. Parikh, D. Batra, and R. Vedantam. IR-VIC: Unsupervised Discovery of Sub-goals for Transfer in. *International Joint Conference on Artificial Intelligence (IJCAI)*, 2020.

56. D. Chaplot, L. Lee, R. Salakhutdinov, D. Parikh, and D. Batra. Embodied Multimodal Multitask Learning. *International Joint Conference on Artificial Intelligence (IJCAI)*, 2020.

57. J. Lu*, V. Goswami*, M. Rohrbach, D. Parikh, and S. Lee. * equal contribution. 12-in-1: Multi-Task Vision and Language Representation Learning. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2020.

58. R. R. Selvaraju, P. Tendulkar, D. Parikh, E. Horvitz, M. Ribeiro, B. Nushi, and E. Kamar. SQuINTing at VQA Models: Interrogating VQA Models with Sub-Questions. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2020. **(Oral)**

59. E. Wijmans, A. Kadian, A. Morcos, S. Lee, I. Essa, D. Parikh, M. Savva, and D. Batra. Decentralized Distributed PPO: Solving PointGoal Navigation. *International Conference on Learning Representations (ICLR),* 2020.

60. J. Lu, D. Batra, D. Parikh, and S. Lee. ViLBERT: Pretraining Task-Agnostic Visiolinguistic Representations for Vision-and-Language Tasks. *Neural Information Processing Systems (NeurIPS)*, 2019.

61. R. Cadene, C. Dancette, H. Ben-younes, M. Cord, and D. Parikh. RUBi: Reducing Unimodal Biases in Visual Question Answering. *Neural Information Processing Systems (NeurIPS)*, 2019.

62. P. Anderson*, A. Shrivastava*, D. Parikh, D. Batra, and S. Lee. * equal contribution. Chasing Ghosts: Instruction Following as Bayesian State Tracking. *Neural Information Processing Systems (NeurIPS),* 2019.

63. J. Yang, Z. Ren, H. Zhu, J. Lin, C. Gan, and D. Parikh. Cross-Channel Communication Networks. *Neural Information Processing Systems (NeurIPS),* 2019.

64. V. Murahari, P. Chattopadhyay, D. Batra, D. Parikh, and A, Das. Improving Generative Visual Dialog by Answering Diverse Questions. *Conference on Empirical Methods in Natural Language Processing (EMNLP)*, 2019.

65. M. Savva, A. Kadian, O. Maksymets, Y. Zhao, E. Wijmans, B. Jain, J. Straub, J. Liu, V. Koltun, J. Malik, D. Parikh, and D. Batra. Habitat: A Platform for Embodied AI Research. *International Conference on Computer Vision (ICCV)*, 2019. **(Best Paper Nominee)**

66. D. Gordon, A. Kadian, D. Parikh, J. Hoffman, and D. Batra. SplitNet: Sim2Sim and Task2Task Transfer for Embodied Visual Navigation. *International Conference on Computer Vision (ICCV)*, 2019.

67. W. Hsiao, I. Katsman, C. Wu, D. Parikh, and K. Grauman. Fashion++: Minimal Edits for Outfit Improvement. *International Conference on Computer Vision (ICCV),* 2019.

68. J. Yang*, Z. Ren*, M. Xu, X. Chen, D. Crandall, D. Parikh, and D. Batra. * equal contribution. Embodied Visual Recognition. *International Conference on Computer Vision (ICCV)*, 2019.

69. S. Datta, K. Sikka, A. Roy, K. Ahuja, D. Parikh, and A. Divakaran. Align2Ground: Weakly Supervised Phrase Grounding Guided byImage-Caption Alignment. *International Conference on Computer Vision (ICCV)*, 2019.

70. R. Selvaraju, S. Lee, Y. Shen, H. Jin, D. Batra, and D. Parikh. Taking a HINT: Leveraging Explanations to Make Vision and Language Models More Grounded. *International Conference on Computer Vision (ICCV)*, 2019.

71. H. Agrawal*, K. Desai*, Y. Wang, X. Chen, R. Jain, M. Johnson, D. Batra, D. Parikh, S. Lee, and P. Anderson. * equal contribution. nocaps: novel object captioning at scale. *International Conference on Computer Vision (ICCV),* 2019.

72. P. Tendulkar, K. Krishna, R. R. Selvaraju, and D. Parikh. Trick or TReAT: Thematic Reinforcement for Artistic Typography. *International Conference on Computational Creativity (ICCC)*, 2019. **(Oral)**

73. J. Kim, N. Kitaev, X. Chen, M. Rohrbach, Y. Tian, D. Batra, and D. Parikh. CoDraw: Collaborative Drawing as a Testbed for Grounded Goal-driven Communication. *Annual Meeting of the Association for Computational Linguistics (ACL)*, 2019.

74. Y. Goyal, Z. Wu, J. Ernst, D. Batra, D. Parikh, and S. Lee. Counterfactual Visual Explanations. *International Conference on Machine Learning (ICML)*, 2019.

75. A. Das, T. Gervet, J. Romoff, D. Batra, D. Parikh, M. Rabbat, and J. Pineau. TarMAC: Targeted Multi-Agent Communication. *International Conference on Machine Learning (ICML)*, 2019.

76. R. Vedantam, K. Desai, S. Lee, M. Rohrbach, D. Batra, and D. Parikh. Probabilistic Neural-symbolic Models for Interpretable Visual Question Answering. *International Conference on Machine Learning (ICML)*, 2019. **(Long Oral)**

77. M. Shah, X. Chen, M. Rohrbach, and D. Parikh. Cycle-Consistency for Robust Visual Question Answering. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2019. **(Oral)**

78. A. Singh, V. Natarajan, M. Shah, Y. Jiang, X. Chen, D. Batra, D. Parikh, M. Rohrbach. Towards VQA Models That Can Read. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2019.

79. E. Wijmans*, S. Datta*, O. Maksymets*, A. Das, G. Gkioxari, S. Lee, I. Essa, D. Parikh, and D. Batra. * equal contribution. Embodied Question Answering in Photorealistic Environments with Point Cloud Perception. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2019. **(Oral)**

80. H. Alamri, V. Cartillier, A. Das, J. Wang, S. Lee, P. Anderson, I. Essa, D. Parikh, D. Batra, A. Cherian, T. K. Marks, C. Hori. Audio-Visual Scene-Aware Dialog. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2019.

81. S. Kottur, J. M. F. Moura, D. Parikh, D. Batra, and M. Rohrbach. CLEVR-Dialog: A Diagnostic Dataset for Multi-Round Reasoning in Visual Dialog. *Conference of the North American Chapter of the Association for Computational Linguistics (NAACL)*, 2019.

82. N. R. Ke, A. Singh, A. Touati, A. Goyal, Y. Bengio, D. Parikh, and D. Batra. Learning Dynamics Model in Reinforcement Learning by Incorporating the Long Term Future. *International Conference on Learning Representations (ICLR),* 2019.

83. C. Hori, H. Alamri, J. Wang, G. Wichern, T. Hori, A. Cherian, T. K. Marks, V. Cartillier, R. G. Lopes, A. Das, I. Essa, D. Batra, and D. Parikh. End-to-End Audio Visual Scene-Aware Dialog using Multimodal Attention-Based Video Features. *International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, 2019.

84. J. Yang*, J. Lu*, S. Lee, D. Batra, and D. Parikh. *joint first authors. Visual Curiosity: Learning to Ask Questions to Learn Visual Recognition. *Conference on Robot Learning (CoRL)*, 2018. **(Oral)**

85. A. Das, G. Gkioxari, S. Lee, D. Parikh, and D. Batra. Neural Modular Control for Embodied Question Answering. *Conference on Robot Learning (CoRL)*, 2018. **(Spotlight)**

86. A. Chandrasekaran*, V. Prabhu*, D. Yadav*, P. Chattopadhyay*, and Devi Parikh. *equal contribution. Do Explanations Make VQA Models More Predictable To A Human? *Conference on Empirical Methods in Natural Language Processing (EMNLP)*, 2018

87. S. Kottur, J. M. F. Moura, D. Parikh, D. Batra, and M. Rohrbach. Visual Coreference Resolution in Visual Dialog using Neural Module Networks. *European Conference on Computer Vision (ECCV),* 2018.

88. R. R. Selvaraju*, P. Chattopadhyay*, M. Elhoseiny, T. Sharma, D. Batra, D Parikh, and S. Lee. *joint first authors. Choose Your Neuron: Incorporating Domain Knowledge through Neuron Importance. *European Conference on Computer Vision (ECCV),* 2018.

89. J. Yang, J. Lu, S. Lee, D. Batra, and D. Parikh. Graph R-CNN for Scene Graph Generation. *European Conference on Computer Vision (ECCV),* 2018.

90. A. Chandrasekaran, D. Parikh, and M. Bansal. Punny Captions: Witty Wordplay in Image Descriptions. *Conference of the North American Chapter of the Association for Computational Linguistics (NAACL)*, 2018.

91. A. Das, S. Datta, G. Gkioxari, S. Lee, D. Parikh, and D. Batra. Embodied Question Answering. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2018. **(Oral)**

92. J. Lu*, J. Yang*, D. Batra, and D. Parikh. Neural Baby Talk. *joint first authors. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2018. **(Spotlight)**

93. A. Agrawal, D. Batra, D. Parikh, and A. Kembhavi. Don't Just Assume; Look and Answer: Overcoming Priors for Visual Question Answering. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2018.

94. J. Lu, A. Kannan, J. Yang, D. Parikh, and D. Batra. Best of Both Worlds: Transferring Knowledge from Discriminative Learning to a Generative Visual Dialog Model. *Neural Information Processing Systems (NIPS)*, 2017.

95. R. R. Selvaraju, A. Das, R. Vedantam, M. Cogswell, D. Parikh, and D. Batra. Grad-CAM: Visual Explanations from Deep Networks via Gradient-based Localization. *International Conference on Computer Vision (ICCV)*, 2017

96. P. Chattopadhyay*, D. Yadav*, V. Prabhu, A. Chandrasekaran, A. Das, S. Lee, D. Batra, and D. Parikh. Evaluating Visual Conversational Agents via Cooperative Human-AI Games. *AAAI Conference on Human Computation and Crowdsourcing (HCOMP)*, 2017

97. M. Lewis, D. Yarats, Y. N. Dauphin, D. Parikh, and D. Batra. Deal or No Deal? End-to-End Learning for Negotiation Dialogues. *Conference on Empirical Methods in Natural Language Processing (EMNLP)*, 2017

98. A. Vijayakumar, R. Vedantam, and D. Parikh. Sound-Word2Vec: Learning Word Representations Grounded in Sounds. Conference on Empirical Methods in Natural Language Processing (EMNLP), 2017

99. A. Miller, W. Feng, A. Fisch, J. Lu, D. Batra, A. Bordes, D. Parikh, and J. Weston. ParlAI: A Dialog Research Software Platform. Conference on Empirical Methods in Natural Language Processing (EMNLP), 2017 (Demo paper)

100. A. Das, S. Kottur, K. Gupta, A. Singh, D. Yadav, J. Moura, D. Parikh, and D. Batra. Visual Dialog. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2017*. **(Spotlight)**

101. J. Lu*, C. Xiong*, D. Parikh, and R. Socher. Knowing When to Look: Adaptive Attention via A Visual Sentinel for Image Captioning. *joint first authors. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2017*. **(Spotlight)**

102. R. Vedantam, S. Bengio, K. Murphy, D. Parikh, and G. Chechik. Context-aware Captions from Context-agnostic Supervision. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2017*. **(Spotlight)**

103. P. Chattopadhyay*, R. Vedantam*, Ramprasaath RS, D. Batra, and D. Parikh. Counting Everyday Objects in Everyday Scenes. *joint first authors. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2017*. **(Spotlight)**

104. Y. Goyal*, T. Khot*, D. Summers-Stay, D. Batra, and D. Parikh. Making the V in VQA Matter: Elevating the Role of Image Understanding in Visual Question Answering. *joint first authors. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2017.

105. J. Yang, A. Kannan, D. Batra, and D. Parikh. LR-GAN: Layered Recursive Generative Adversarial Networks for Image Generation. *International Conference on Learning Representations (ICLR),* 2017.

106. J. Lu, J. Yang, D. Batra, and D. Parikh. Hierarchical Question-Image Co-Attention for Visual Question Answering. *Neural Information Processing Systems (NIPS)*, 2016.

107. A. Das, H. Agrawal, C. L. Zitnick, D. Parikh, and D. Batra. Human Attention in Visual Question Answering: Do Humans and Deep Networks look at the same regions? *Conference on Empirical Methods in Natural Language Processing (EMNLP),* 2016.

108. A. Ray, G. Christie, M. Bansal, D. Batra, and D. Parikh. Question Relevance in VQA: Identifying Non-Visual And False-Premise Questions. *Conference on Empirical Methods in Natural Language Processing (EMNLP),* 2016.

109. A. Agrawal, D. Batra, and D. Parikh. Analyzing the Behavior of Visual Question Answering Models. *Conference on Empirical Methods in Natural Language Processing (EMNLP),* 2016.

110. H. Agrawal, A. Chandrasekaran, D. Batra, D. Parikh, and M. Bansal. Sort Story: Sorting Jumbled Images and Captions into Stories. *Conference on Empirical Methods in Natural Language Processing (EMNLP),* 2016.

111. X. Lin and D. Parikh. Leveraging Visual Question Answering for Image-Caption Ranking. *European Conference on Computer Vision (ECCV)*, 2016.

112. A. Dubey, N. Naik, D. Parikh, R. Raskar, and C. Hidalgo. Deep Learning the City: Quantifying Urban Perception at a Global Scale. *European Conference on Computer Vision (ECCV)*, 2016.

113. A. Chandrasekaran, A. Kalyan, S. Antol, M. Bansal, D. Batra, C. L. Zitnick, and D. Parikh. We Are Humor Beings: Understanding and Predicting Visual Humor. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2016. **(Spotlight)**

114. P. Zhang*, Y. Goyal*, D. Summers-Stay, D. Batra, and D. Parikh. Yin and Yang: Balancing and Answering Binary Visual Questions. *joint first authors. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2016.

115. S. Kottur*, R. Vedantam*, J. Moura, and D. Parikh. Visual Word2Vec (vis-w2v): Learning Visually Grounded Word Embeddings using Abstract Scenes. *joint first authors. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2016.

116. J. Yang, D. Parikh, and D. Batra. Joint Unsupervised Learning of Deep Representations and Image Clusters. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2016.

117. T. Huang, F. Ferraro, N. Mostafazadeh, I. Misra, J. Devlin, A. Agrawal, R. Girshick, X. He, P. Kohli, D. Batra, C. L. Zitnick, D. Parikh, L. Vanderwende, M. Galley, and M. Mitchell. Visual Storytelling. *Conference of the North American Chapter of the Association for Computational Linguistics (NAACL)*, 2016.

118. N. Mostafazadeh, N. Chambers, X. He, D. Parikh, D. Batra, L. Vanderwende, P. Kohli, and J. Allen. A Corpus and Evaluation Framework for Deeper Understanding of Commonsense

Stories. *Conference of the North American Chapter of the Association for Computational Linguistics (NAACL)*, 2016. **(Oral)**

119. S. Lad, B. Romera Parades, J. Valentin, Philip Torr, and D. Parikh. Knowing Who To Listen To: Prioritizing Experts from a Diverse Ensemble for Attribute Personalization. *International Conference on Image Processing (ICIP)*, 2016.

120. S. Antol*, A. Agrawal*, J. Lu, M. Mitchell, D. Batra, C. L. Zitnick, and D. Parikh. VQA: Visual Question Answering. *joint first authors. *International Conference on Computer Vision (ICCV)*, 2015.

121. R. Vedantam*, X. Lin*, T. Batra, C. L. Zitnick, and D. Parikh. Learning Common Sense Through Visual Abstraction. *joint first authors. *International Conference on Computer Vision (ICCV)*, 2015.

122. X. Lin and D. Parikh. Don't Just Listen, Use Your Imagination: Leveraging Visual Common Sense for Non-Visual Tasks. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR),* 2015. **(Oral)**

123. M. Jas and D. Parikh. Image Specificity. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR),* 2015. **(Oral)**

124. R. Vedantam, C. L. Zitnick and D. Parikh. CIDEr: Consensus-based Image Description Evaluation. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR),* 2015.

125. A. Deza and D. Parikh. Understanding Image Virality. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR),* 2015.

126. M. Sakurada T. Yairi, Y. Nakajima, N. Nishimura, and D. Parikh. Semantic Classification of Spacecraft's Status: Integrating System Intelligence and Human Knowledge. *Proceedings of the 2015 IEEE International Conference on Semantic Computing (ICSC)*, 2015.

127. S. Antol, C. L. Zitnick and D. Parikh. Zero-Shot Learning via Visual Abstraction. *European Conference on Computer Vision (ECCV), 2014*.

128. S. Lad and D. Parikh. Interactively Guiding Semi-Supervised Clustering via Attribute-based Explanations. *European Conference on Computer Vision (ECCV)*, 2014.

129. A. Bansal, A. Farhadi and D. Parikh. Towards Transparent Systems: Semantic Characterization of Failure Modes. *European Conference on Computer Vision (ECCV),* 2014.

130. P. Zhang, J. Wang, A. Farhadi, M. Hebert and D. Parikh. Predicting Failures of Vision Systems. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR),* 2014.

131. G. Christie, A. Parkash, U. Krothapalli and D. Parikh. Predicting User Annoyance Using Visual Attributes. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR),* 2014.

132. D. Parikh. Visual Attributes for Enhanced Human-Machine Communication. *Allerton Conference on Communication, Control and Computing*, 2013. **(Invited Paper, Oral).**

133. N. Turakhia and D. Parikh. Attribute Dominance: What Pops Out? *International Conference on Computer Vision (ICCV)*, 2013.

134. A. Sadovnik, A. C. Gallagher, D. Parikh and T. Chen. Spoken Attributes: Mixing Binary and Relative Attributes to Say the Right Thing. *International Conference on Computer Vision (ICCV)*, 2013.

135. D. Parikh and K. Grauman. Implied Feedback: Learning Nuances of User Behavior in Image Search. *International Conference on Computer Vision (ICCV)*, 2013.

136. C. L. Zitnick, D. Parikh and L. Vanderwende. Learning the Visual Interpretation of Sentences. *International Conference on Computer Vision (ICCV)*, 2013.

137. C. L. Zitnick and D. Parikh. Bringing Semantics Into Focus Using Visual Abstraction. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR),* 2013. **(Oral)**

138. R. Mottaghi, S. Fidler, J. Yao, R. Urtasun and D. Parikh. Analyzing Semantic Segmentation Using Hybrid Human-Machine CRFs. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2013.

139. A. Biswas and D. Parikh. Simultaneous Active Learning of Classifiers & Attributes via Relative Feedback. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2013.

140. M. Rastegari, A. Diba, D. Parikh and A. Farhadi. Multi-Attribute Queries: To Merge or Not to Merge? *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2013.

141. A. Parkash and D. Parikh. Attributes for Classifier Feedback. *European Conference on Computer Vision (ECCV),* 2012 **(Oral)**.

142. D. Parikh, A. Kovashka, A. Parkash and K. Grauman. Relative Attributes for Enhanced Human-Machine Communication. Invited paper at *AAAI Conference on Artificial Intelligence*, 2012 **(Invited Paper, Oral)**.

143. C. Li, D. Parikh and T. Chen. Automatic Discovery of Groups of Objects for Scene Understanding. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR),* 2012.

144. A. Kovashka, D. Parikh and K. Grauman. WhittleSearch: Image Search with Relative Attribute Feedback. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR),* 2012.

145. K. Duan, D. Parikh, D. Crandall and K. Grauman. Discovering Localized Attributes for Fine-grained Recognition. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR),* 2012.

146. C. L. Zitnick and D. Parikh. The Role of Image Understanding in Contour Detection. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR),* 2012.

147. P. Isola, D. Parikh, A. Torralba and A. Oliva. Understanding the Intrinsic Memorability of Images. *Neural Information Processing Systems (NIPS)*, 2011.

148. D. Parikh and K. Grauman. Relative Attributes. *International Conference on Computer Vision (ICCV)*, 2011 **(Oral) Marr Prize (Best Paper Award) Winner**.

149. D. Parikh. Recognizing Jumbled Images: The Role of Local and Global Information in Image Classification. *International Conference on Computer Vision (ICCV)*, 2011.

150. C. Li, D. Parikh and T. Chen. Extracting Adaptive Contextual Cues from Unlabeled Regions. *International Conference on Computer Vision (ICCV)*, 2011.

151. D. Parikh and C. L. Zitnick. Finding The Weakest Link in Person Detectors. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR),* 2011.

152. D. Parikh and K. Grauman. Interactively Building a Discriminative Vocabulary of Nameable Attributes. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR),* 2011.

153. A. Gallagher, D. Batra and D. Parikh. Inference for Order Reduction in MRFs. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR),* 2011.

154. D. Parikh and C. L. Zitnick. The Role of Features, Algorithms and Data in Visual Recognition. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR),* 2010.

155. D. Batra, A. Gallagher, D. Parikh, T. Chen. Beyond Trees: MRF Inference via Outer-Planar Decomposition. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR),* 2010.

156. D. Batra, A. Kowdle, D. Parikh, J. Luo, T. Chen. iCoseg: Interactive Co-segmentation with Intelligent Scribble Guidance. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR),* 2010.

157. D. Batra, D. Parikh, A. Kowdle, T. Chen and J. Luo. Seed Image Selection in Interactive Cosegmentation. *IEEE International Conference on Image Processing (ICIP)*, 2009

158. D. Parikh, C. L. Zitnick and T. Chen. Unsupervised Learning of Hierarchical Spatial Structures in Images. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2009

159. C. Mao, H. Lee, D. Parikh, T. Chen and S. Huang. Semi-Supervised Cotraining and Active Learning based Approach for Multi-view Intrusion Detection. *ACM Symposium on Applied Computing (SAC),* 2009.

160. D. Parikh, C. L. Zitnick and T. Chen. Determining Patch Saliency Using Low-Level Context. *European Conference on Computer Vision (ECCV)*, 2008.

161. D. Parikh, C. L. Zitnick and T. Chen. From Appearance to Context-Based Recognition: Dense Labeling in Small Images. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2008.

162. D. Parikh and T. Chen. Bringing Diverse Classifiers to Common Grounds: dtransform. *International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, 2008.

163. D. Parikh and T. Chen. Unsupervised Identification of Multiple Objects of Interest from Multiple Images: dISCOVER. *Asian Conference on Computer Vision (ACCV),* 2007.

164. D. Parikh and T. Chen. Hierarchical Semantics of Objects (hSOs). *IEEE International Conference on Computer Vision (ICCV),* 2007.

165. R. Polikar, D. Parikh, and S.Mandayam. Multiple Classifiers System for Multisensor Data Fusion. *IEEE Sensors Applications Symposium*, 2006.

166. D. Parikh, N.Stepenosky, A.Topalis, D.Green, J.Kounios, C.Clark, and R. Polikar. Ensemble Based Data Fusion for Early Diagnosis of Alzheimer's Disease. *IEEE Proceedings of The Engineering in Medicine and Biology*, 2005.

167. D. Parikh, and R. Polikar. A Multiple Classifier Approach for Multisensor Data fusion. *IEEE Proceedings of Information Fusion*, 2005.

168. D. Parikh, M. Kim, J. Oagaro, S. Mandayam, and R. Polikar. Combining Classifiers for Multisensor Data Fusion. *IEEE Proceedings of Systems, Man and Cybernetics*, 2004.

169. D. Parikh, M. Kim, J. Oagaro, S. Mandayam, and R. Polikar. Ensemble of Classifiers Approach for NDT Data Fusion. *IEEE Proceedings of Ultrasonics, Ferroelectrics and Frequency Control*, 2004.

170. D. Parikh, Y. Mehta, and K. Jahan. Evaluate the Effect of Ground Tire Rubber on Laboratory Rutting Performance of Asphalt Concrete Mixtures. *Proceedings of Industrial and Hazardous Waste Conference*, 2002.

Peer Reviewed Workshop Papers (Not updated since 2016)

171. Y. Goyal, A. Mohapatra, D. Parikh and D. Batra. Towards Transparent AI Systems: Interpreting Visual Question Answering Models. *Workshop on Visualization for Deep Learning, International Conference on Machine Learning (ICML)*, 2016. **(Best student paper)**

172. A. Das, H. Agrawal, C. L. Zitnick, D. Parikh and D. Batra. Human Attention in Visual Question Answering: Do Humans and Deep Networks Look at the Same Regions? *Workshop on Visualization for Deep Learning, International Conference on Machine Learning (ICML)*, 2016. **(Best student paper)**

173. X. Lin, M. Cogswell, D. Parikh and D. Batra. Propose and Re-rank Semantic Segmentation via Deep Image Classification. *Big Vision workshop at IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2014.

174. A. Bansal, A. Kowdle, D. Parikh, A. Gallagher and C. L. Zitnick. Which Edges Matter? *Workshop on 3D Representation and Recognition (3dRR)*, in conjunction with the *International Conference on Computer Vision (ICCV),* 2013.

175. D. Parikh, P. Isola, A. Torralba and A. Oliva. Understanding the Intrinsic Memorability of Images. *Vision Sciences Society (VSS)*, 2012.

176. D. Parikh and C. L. Zitnick. Human-Debugging of Machines. *Second Workshop on Computational Social Science and the Wisdom of Crowds at Neural Information Processing Systems (NIPS),* 2011.

177. D. Parikh and K. Grauman. Interactive Discovery of Task-Specific Nameable Attributes. *First Workshop on Fine-Grained Visual Categorization (FGVC),* held in conjunction with *IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2011*. **(Best Poster Award)**

178. D. Batra, A. Kowdle, D. Parikh and T. Chen. Cutout Search: Putting a Name to the Picture. *Workshop on Internet Vision, IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2009.

179. D. Parikh and G. Jancke. Localization and Segmentation of a 2D High Capacity Color Barcode. *Workshop on Applications in Computer Vision (WACV)*, 2008.

180. D. Parikh and T. Chen. Unsupervised Learning of Hierarchical Semantics of Objects (hSOs). *Beyond Patches Workshop, IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2007.* **(Best Paper Award)**

181. D. Parikh and T. Chen. Classification-Error Cost Minimization Strategy: dCMS. *IEEE Statistical Signal Processing Workshop,* 2007.

182. D. Parikh, R. Sukthankar, T. Chen, and M. Chen. Feature-based Part Retrieval for Interactive 3D Reassembly. *IEEE Workshop on Applications of Computer Vision (WACV)*, 2007.

Technical Reports

183. C. L. Zitnick and D. Parikh. Color Source Separation for Enhanced Pixel Manipulations. MSR-TR-2011-98, Microsoft Research, 2011.

Demos

184. N. Agrawal, A. Biswas, A. Kovashka, K. Grauman and D. Parikh. Relative Attributes for Enhanced Human-Machine Communication. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2013. (patent pending)

185. D. Batra, A. Kowdle, K. Tang, D. Parikh, J. Luo and T. Chen. Interactive Cosegmentation by Touch. *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2009.

Patents

186. A. Kovashka, D. Parikh and K. Grauman. Efficient Identifying Images, Videos, Songs or Documents Most Relevant to the User Based on Attribute Feedback. Filed to USPTO.

INVITED TALKS (Not updated since 2022)

Multimodal Generative AI

- Multimodal Workshop
  Conference of the North American Chapter of the Association for Computational Linguistics (NAACL), 2022

- Computer Vision For Fashion Art and Design Workshop
  IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2022

Vision & Language

- Keynote at Automated Knowledge Base Construction (AKBC), 2021

AI and Creativity: Sketches

- Workshops on Sketches for Human Creativity
  International Conference on Computer Vision (ICCV), 2021

How I Decide What To Work On

- Workshop on More Exploration, Less Exploitation
  International Conference on Computer Vision (ICCV), 2021

Advice For Junior Faculty

- Workshop on Share Stories and Lessons Learned
  International Conference on Computer Vision (ICCV), 2021

Multimodal and Creative AI Systems

- Samsung AI Forum
  November 2020

Multi-modality, Creativity, And Climate Change

- AI4ALL, Georgia Tech
  June 2021

- Distinguished Lecture at F C Kohli Day, IIIT Hyderabad
  March 2021

- Carnegie Mellon University AI Seminar Series
  October 2020

- Ensemble Learnings Seminar at MailChimp
  October 2019

Some Vision + Language, more AI + Creativity

- MIT Vision Seminar
  July 2020

AI + Creativity

- Workshop on Machine Learning for Creativity and Design
  Neural Information Processing Systems (NeurIPS), 2021

- AI for Content Creation Workshop
  IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2021

- Workshop on Affect in Collaborative Creation
  Association for the Advancement of Artificial Intelligence (AAAAI), 2021

- Workshop on Measuring Computational Creativity
  International Symposium on Electronic Art (ISEA), 2020

- Workshop on Computer Vision for Fashion, Art and Design
  IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2020

- Workshop on Sensing, Understanding and Synthesizing Humans
  International Conference on Computer Vision (ICCV)
  Seoul, South Korea, October 2019

AI Systems That Can See And Talk

- Keynote at the International Conference on Learning Representations (ICLR), 2020

- Diagram Image Retrieval and Analysis (DIRA) Workshop and Challenge

IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2020

V∩L → V∪L: Breaking away from task- and dataset-specific vision-and-language models

- 3rd Workshop on Closing the Loop Between Vision and Language
  International Conference on Computer Vision (ICCV)
  Seoul, South Korea, October 2019

Beyond a self-sufficient pixel tensor: Modeling external knowledge and internal image structure

- Workshop on Scene Graph Representation and Learning
  International Conference on Computer Vision (ICCV)
  Seoul, South Korea, October 2019

Agents that See, Talk, Act, and Reason

- Keynote at Winter Conference on Applications in Computer Vision (WACV)
  Waikoloa Village, Hawaii, January 2019

- Samsung Research America's AI Summit
  Mountain View, CA, January 2019

- Open Images Challenge Workshop
  European Conference on Computer Vision (ECCV)
  Munich, Germany, September 2018

- RE-WORK event for Women in AI
  San Francisco, CA, June 2018

Forcing Vision and Language Models to Not Just Talk But Also Actually See

- Women in Computer Vision
  IEEE Conference on Computer Vision and Pattern Recognition (CVPR)
  Long Beach, CA, June 2019

- Workshop on Language and Vision
  IEEE Conference on Computer Vision and Pattern Recognition (CVPR)
  Long Beach, CA, June 2019

- Towards Causal, Explainable and Universal Medical Visual Diagnosis
  IEEE Conference on Computer Vision and Pattern Recognition (CVPR)
  Long Beach, CA, June 2019

- Workshop on Vision With Biased or Scarce Data
  IEEE Conference on Computer Vision and Pattern Recognition (CVPR)
  Long Beach, CA, June 2019

- Workshop on Conceptual Captions
  IEEE Conference on Computer Vision and Pattern Recognition (CVPR)
  Long Beach, CA, June 2019

- The How2 Challenge: New Tasks for Vision & Language
  International Conference on Machine Learning (ICML)
  Long Beach, CA, June 2019

- VizWiz Grand Challenge: Answering Visual Questions from Blind People
  European Conference on Computer Vision (ECCV)
  Munich, Germany, September 2018

- Beyond Supervised Learning Workshop
  IEEE Conference on Computer Vision and Pattern Recognition (CVPR)
  Salt Lake City, UT, June 2018

Generalization "Opportunities" in Visual Question Answering

- Workshop on New Forms of Generalization in Deep Learning and Natural Language Processing
  Conference of the North American Chapter of the Association for Computational Linguistics (NAACL)
  New Orleans, LA, June 2018

AI for Accessing Visual Content via Natural Language

- F8, Facebook's Annual Developer Conference
  San Jose, CA, May 2018

Embodied Question Answering

- Workshop on Multi-modal Perception and Control
  Robotics: Science and Systems (R:SS)
  Pittsburgh, PA, June 2018

- Deep Vision Workshop
  IEEE Conference on Computer Vision and Pattern Recognition (CVPR)
  Salt Lake City, UT, June 2018

- Indian Institute of Technology (IIT) Delhi
  Delhi, India, December 2017

- Indian Institute of Technology (IIT) Gandhinagar
  Gandhinagar, India, December 2017

- Workshop on Visually-Grounded Interaction and Language (ViGIL)
  Neural Information Processing Systems (NIPS)
  Long Beach, CA, December 2017

Learning by Playing

- Workshop on the Role of Simulation in Computer Vision
  IEEE International Conference on Computer Vision (ICCV)
  Venice, Italy, October 2017

- Interactive Learning Workshop
  Simons Institute for the Theory of Computing
  Berkeley, CA, February 2017

- First Workshop on Object Understanding for Interaction
  International Conference on Computer Vision (ICCV) 2015
  Santiago, Chile, December 2015

VQA → Visual Dialog

- Reinforcement Leaning Summer School (RLSS)
  Montreal, Canada, July 2017

Visual Dialog

- Facebook Faculty Summit
  New York, NY, October 2017

- 1st Workshop on Visual Understanding Across Modalities
  IEEE Conference on Computer Vision and Pattern Recognition (CVPR)
  Honolulu, HI, July 2017

Towards Theory of AI's Mind

- NVIDIA GTC (GPU Technology Conference)
  San Jose, CA, March 2018

- AAAI Human-AI Collaboration emerging topics track
  New Orleans, LA, February 2018

- Language and Vision Workshop
  IEEE Conference on Computer Vision and Pattern Recognition (CVPR)
  Honolulu, HI, July 2017

Making the V in VQA Matter: Elevating the Role of Image Understanding in Visual Question Answering

- Large-Scale Scene Understanding (LSUN) Challenge Workshop
  IEEE Conference on Computer Vision and Pattern Recognition (CVPR)
  Honolulu, HI, July 2017

- Google
  Mountain View, CA, December 20016

- Mysore Vision, Language, and AI Workshop
  Mysore, India, December 2016

Learning Common Sense from Stories

- Workshop on Storytelling with Images and Videos
  European Conference on Computer Vision (ECCV)
  Amsterdam, Netherlands, October 2016

Learning Common Sense from Visual Abstractions

- Workshop on Virtual/Augmented Reality for Visual Artificial Intelligence
  European Conference on Computer Vision (ECCV)
  Amsterdam, Netherlands, October 2016

Visual Question Answering (VQA)

- AI With The Best
  Online conference, October 2017

- Zoox
  Menlo Park, CA, January 2017

- University of California, Berkeley
  Berkeley, CA, January 2017

- Workshop on Assistive Computer Vision and Robotics
  European Conference on Computer Vision (ECCV)
  Amsterdam, Netherlands, October 2016

- International Computer Vision Summer School (ICVSS)
  Sicily, Italy, July 2016

- Large Scale Visual Recognition and Retrieval: BigVision Workshop
  IEEE Conference on Computer Vision and Pattern Recognition (CVPR)
  Las Vegas, NV, June 2016

- Closing the Loop Between Language and Vision Workshop
  International Conference on Computer Vision (ICCV) 2015
  Santiago, Chile, December 2015

- Women in Computer Vision (WiCV) Workshop
  IEEE Conference on Computer Vision and Pattern Recognition (CVPR)
  Boston, MA, June 2015

Words, Pictures, and Common Sense

- Embedded Vision Summit
  Santa Clara, CA, May 2018

- Facebook event for Women in AI
  Montreal, Canada, March 2018

- Language Technologies Institute (LTI) Colloquium at Carnegie Mellon University (CMU)
  Pittsburgh, PA, February 2018

- ML@GT (Machine Learning at Georgia Tech) Seminar
  Atlanta, GA, September 2017

- Computers and Thought Award (IJCAI)
  Melbourne, Australia, August 2017

- Keynote at the European Chapter of the Association for Computational Linguistics (EACL)
  Valencia, Spain, April 2017

- Sackler Forum on Machine Learning
  Washington, D.C., January 2017

- Georgia Institute of Technology
  Atlanta, GA, April 2016

- University of Texas at Austin
  Austin, TX, April 2016

- Toyota Technological Institute at Chicago (TTIC)
  Chicago, IL, April 2016

- Facebook AI Research
  Menlo Park, CA, March 2016

- Microsoft Research
  Redmond, WA, March 2016

Interpretable Mid-level Representations for Image Search

- eBay
  San Jose, CA, March 2017

Reading Between The Lines & Visual Question Answering (VQA)

- Second IEEE Workshop on Large Scale Visual Commerce (LSVisCom)
  IEEE Conference on Computer Vision and Pattern Recognition (CVPR)
  Boston, MA, June 2015

Words, Pictures, and Imagination

- Baidu
  Sunnyvale, CA, August 2015

- Google
  Mountain View, CA, August 2015

- Dato
  Seattle, WA, August 2015

- University of Toronto
  Vision Seminar, Toronto, Canada, April 2015

- Carnegie Mellon University
  Vision and Autonomous Systems Center (VASC) Seminar, Pittsburgh, PA, April 2015

Beyond Mindless Labeling: *Really* Leveraging Humans to Build Intelligent Machines

- Indian Institute of Science
  Bangalore, India, December 2014

- Invited talk at workshop on Human Propelled Machine Learning
  Neural Information Processing Systems (NIPS) 2014
  Montreal, Canada, December 2014

- University of Maryland
  Vision Seminar, College Park, MD, October 2014

- University of Oxford
  Oxford, UK, September 2014

- Microsoft Research
  Cambridge, UK, September 2014

- IBM T. J. Watson Research Center
  Yorktown Heights, NY, August 2014

- Workshop on Computer Vision and Human Computation
  IEEE Conference on Computer Vision and Pattern Recognition (CVPR) 2014
  Columbus, OH, June 2014

- Stanford Workshop on AI and Knowledge (SWANK)
  Stanford, CA, April 2014

Enhancing Human-Machine Communication via Attributes

- Allerton Conference on Communication, Control, and Computing
  Invited Session on Active Learning, Search and Visual Recognition, Monticello, IL, October 2013

- eBay Research
  San Jose, CA, August 2013

- Amazon
  Seattle, WA, July 2013

- University of Washington
  Recognition Reading Group, Seattle, WA, July 2013

- IST Austria
  Symposium on Computer Vision and Machine Learning, Klosterneuburg, Austria, Oct 2012

- Invited Talk at AAAI Conference on Artificial Intelligence
  Subarea Spotlights (Vision), Toronto, Canada, July 2012

Advancing Computer Vision by Leveraging Humans

- Virginia Tech
  ECE Graduate Seminar, Blacksburg, VA, November 2013

- Virginia Tech
  Center for Embedded Systems for Critical Applications (CESCA) Seminar, Blacksburg, VA, November 2013

- Carnegie Mellon University
  Vision and Autonomous Systems Center (VASC) Seminar, Pittsburgh, PA, May 2012

- Virginia Tech
  Electrical and Computer Engineering Departmental Seminar, Blacksburg, VA, April 2012

- University of Massachusetts
  Computer Science Departmental Seminar, Amherst, MA, April 2012

- Rutgers University
  Electrical and Computer Engineering Departmental Seminar, New Brunswick, NJ, March 2012

- Boston University
  Electrical and Computer Engineering Seminar, Boston, MA March 2012

- University of Minnesota

Computer Science and Engineering Colloquium, Minneapolis, MN, March 2012

- University of Washington
  Computer Science and Engineering Colloquium, Seattle, WA, February 2012

- Michigan State University
  Computer Science and Engineering Lecture Series, East Lansing, MI, February 2012

- Microsoft Research
  Adaptive and Interactive Systems Seminar, Redmond, WA, July 2010

Human-Debugging of Machine Visual Recognition

- University of California at Berkeley
  Berkeley, CA, January 2012

- University of California at Santa Barbara
  Computer Science and Electrical and Computer Engineering Colloquium, January 2012

- University of California at San Diego
  San Diego, CA, January 2012

- University of California at Irvine
  Irvine, CA, January 2012

- Cornell University
  AI Seminar, Ithaca, NY, October 2011

- Workshop on Human Interaction in Computer Vision (HICV)
  International Conference on Computer Vision (ICCV), Barcelona, Spain, November 2011

- University of Michigan
  Midwest Computer Vision Workshop, Ann Arbor, MI, May 2011

- Toyota Technological Institute Chicago (TTIC)
  Research at TTIC Seminar, Chicago, IL, January 2011

- Massachusetts Institute of Technology (MIT)
  Vision Seminar, Cambridge, MA, November 2010

The Role of Features, Algorithms and Data in Visual Recognition

- Microsoft Research
  Vision Technology (VisTech) Seminar, Redmond, WA, July 2010

- Cornell University
  Advanced Multimedia Processing Laboratory, Ithaca, NY, April 2010

The Role of Context in Image Understanding: When, For What, and How?

- Georgia Institute of Technology
  Atlanta, GA, April 2010

- Toyota Technological Institute Chicago (TTIC)
  Chicago, IL, April 2009

- University of British Columbia
  Vancouver, Canada, April 2009

- California Institute of Technology
  Pasadena, CA, April 2009

- University of Texas at Austin
  Computer Science Colloquium, Austin, TX, April 2009

- Carnegie Mellon University
  Vision and Autonomous Systems Center (VASC) Seminar, Pittsburgh, PA, September 2009

- Microsoft Research
  Vision Technology (VisTech) Seminar, Redmond, WA, Summer 2008

Other

- Brown University
  Providence, RI, May 2011
  Richer Human-Machine Communication in Attributes-based Visual Recognition

- Toyota Technological Institute Chicago (TTIC)
  Research at TTIC, Chicago, IL, October 2009
  Research Overview

- Microsoft Research
  Vision Technology (VisTech) Seminar, Redmond, WA, Summer 2007
  Unsupervised Learning of Hierarchical Semantics of Objects (hSOs)

PROFESSIONAL ACTIVITIES (Not updated since 2022)

Advisory Board

- Advisory Board of Transactions on Machine Learning Research, 2021
- International Joint Conference on Artificial Intelligence (IJCAI), 2018

Best Paper Award Committee

- IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2022

Chair (Not updated since 2018)

- Area Chair
  European Conference on Computer Vision (ECCV) 2018.

- Area Chair
  IEEE Conference on Computer Vision and Pattern Recognition (CVPR) 2018.

- Area Chair
  International Conference on Computer Vision (ICCV) 2017.

- Area Chair
  IEEE Conference on Computer Vision and Pattern Recognition (CVPR) 2017.

- Senior Program Committee Member
  AAAI Conference on Human Computation and Crowdsourcing (HCOMP) 2016.

- Area Chair
  European Conference on Computer Vision (ECCV) 2016

- Area Chair
  International Joint Conference on Artificial Intelligence (IJCAI) 2016.

- Poster Chair
  IEEE Conference on Computer Vision and Pattern Recognition (CVPR) 2016.

- Session Chair
  International Conference on Computer Vision (ICCV) 2015.

- Area Chair
  International Conference on Computer Vision (ICCV) 2015.

- Session Chair
  IEEE Conference on Computer Vision and Pattern Recognition (CVPR) 2015.

- Area Chair
  IEEE Conference on Computer Vision and Pattern Recognition (CVPR) 2015.

- Student Activities Co-Chair
  IEEE Conference on Computer Vision and Pattern Recognition (CVPR) 2015.

- Area Chair
  Indian Conference on Computer Vision, Graphics and Image Processing (ICVGIP) 2014.

- Spotlight Session Chair
  IEEE Conference on Computer Vision and Pattern Recognition (CVPR) 2013.

- Area Chair
  International Conference on Pattern Recognition (ICPR) 2012.

Panelist (Not updated since 2017)

- Sackler Forum Future of AI Event
  National Academy of Sciences and U.K. Royal Society
  Washington, D.C., February 2017

- National Science Foundation (NSF)
  Information and Intelligent Systems (IIS) Division, 2016.

- National Science Foundation (NSF)
  Information and Intelligent Systems (IIS) Division, 2015.

- National Science Foundation (NSF)
  Information and Intelligent Systems (IIS) Division, 2011.

Organizer (Not updated since 2018)

- Good Citizen Panel

IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2018

- 3rd VQA Challenge and Visual Dialog Workshop
  IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2018

- Workshop on Visually-Grounded Interaction and Language (ViGIL)
  Neural Information Processing Systems (NIPS), 2017

- 2nd Workshop on Closing the Loop Between Vision and Language
  IEEE Conference on Computer Vision (ICCV), 2017

- 2nd Visual Question Answering Challenge Workshop
  IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2017

- Visual Question Answering Challenge Workshop
  IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2016

- Future Directions in Computer Vision
  Department of Defense workshop, 2015

- Third International Workshop on Parts and Attributes
  European Conference on Computer Vision (ECCV), 2014

- Human-Machine Communication for Visual Recognition and Search (HMCV)
  European Conference on Computer Vision (ECCV), 2014

- First Mid-Atlantic Computer Vision (MACV) workshop, 2014
  Held at Virginia Tech, Blacksburg, VA
  (~110 attendees)

- Tutorial on Attributes
  IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2013
  (~150 attendees)

- Workshop on Advancing Computer Vision with Humans in the Loop (ACVHL)
  IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2010
  (~100 attendees)

Associate Editor

- Springer's Machine Vision & Applications (MVA) Journal (2018-2021)
- Computer Vision & Image Understanding (CVIU) Journal (2018-2021)

Reviewer for Journals

- Nature

- Transactions on Pattern Analysis and Machine Intelligence (PAMI)

- International Journal on Computer Vision (IJCV)

- Computer Vision and Image Understanding (CVIU)

- IEEE Transactions on Image Processing (TIP)

- Frontiers in Perception Science
- Transactions on Signal Processing (TSP)
- Neurocomputing (NEUCOM)
- IEEE Transactions on Systems, Man and Cybernetics (SMC)
- Journal of Visual Communication and Image representation (JVCI)
- IEEE Signal Processing Letters (SPL)
- IEEE Transactions on Information Forensics and Security (TIFS)
- EURASIP Journal on Advances in Signal Processing (JASP)

Program Committee for Conferences (Not updated since 2020)

- International Conference on Computational Creativity (ICCC) 2020
- IEEE Conference on Computer Vision and Pattern Recognition (CVPR) 2009, 2010, 2011, 2012, 2013, 2014
- European Conference on Computer Vision (ECCV) 2010, 2012, 2014
- IEEE International Conference on Computer Vision (ICCV) 2009, 2011, 2013
- Neural Information Processing Systems (NIPS) 2010, 2012
- Association for the Advancement of Artificial Intelligence (AAAI) 2012
- IEEE International Conference on Image Processing (ICIP) 2009, 2010, 2011
- Indian Conference on Computer Vision, Graphics and Image Processing (ICVGIP) 2010
- CrowdConf 2010
- The Human Computation Workshop (HCOMP) 2012
- International Conference on Biometrics: Theory, Applications and Systems (BTAS) 2012
- ACM Symposium on User Interface Software and Technology (UIST) 2013

Program Committee of Workshops (Not updated since 2014)

- Workshop on Storytelling with Images and Videos (VisStory)
  European Conference on Computer Vision (ECCV), 2014
- Vision Meets Cognition Workshop
  IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2014
- Computational Models of Social Interactions and Behavior
  IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2014

- Large Scale Visual Commerce
  IEEE International Conference on Computer Vision (ICCV), 2013

- Understanding Human Activities: Context and Interactions
  IEEE International Conference on Computer Vision (ICCV), 2013

- Visual Analysis beyond Semantics (vABS)
  IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2013

- SUNw: Scene Understanding Workshop
  IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2013

- Fine Grained Visual Categorization Workshop
  IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2013

- Human Computation (HCOMP)
  Association for the Advancement of Artificial Intelligence (AAAI), 2012

- Parts and Attributes
  European Conference on Computer Vision (ECCV), 2012

- Web-scale Vision and Social Media
  European Conference on Computer Vision (ECCV), 2012

Panelist at Workshops (Not updated since 2015)

- Closing the Loop Between Language and Vision Workshop
  International Conference on Computer Vision (ICCV) 2015
  Santiago, Chile, December 2015

- Fine Grained Visual Categorization (FGVC)
  IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2011

- Visual Scene Understanding (ViSU)
  IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2009

Member

- Association for the Advancement of Artificial Intelligence (AAAI)

- Institute of Electrical and Electronics Engineers (IEEE)

- Society of Women Engineers (SWE)

University Service

- School Advisor Committee, School of Interacting Computing
  Georgia Tech (Fall 2018-Spring 2020)

- Faculty Search Committee, Bradley Department of Electrical and Computer Engineering, Virginia Tech (Fall 2015-Spring 2016)

- Faculty Search Committee, Computer Science Department, Virginia Tech (Fall 2014-Spring 2015)

- Faculty Advisory Committee (Fall 2013 – Spring 2016)
- Faculty Search Committee, Computer Science Department, Virginia Tech (Fall 2013-Spring 2014)
- Assistant Marshall at Graduation Commencement Ceremony, Fall 2013, Spring 2014

Outreach Activities (Not updated since 2015)

- Partnered with the College of Engineering at Virginia Tech to obtain support from the university for a summer bridge program for the New Horizon Graduate Scholars – a diverse group of graduate students who are offered a variety of professional development opportunities – to help them transition from their undergraduate experiences to a research environment. Hosted participants in the lab for a seminar and opportunity to shadow graduate students.
- Mentor for Women in Computer Vision Workshop at the IEEE Conference on Computer Vision and Pattern Recognition (CVPR) 2015
- Mentor at the Doctoral Consortium at the IEEE Conference on Computer Vision and Pattern Recognition (CVPR) 2015
- Speaker at a College of Engineering Graduate Students Networking event on "Finding Your Passion and Building Your Research Agenda", Spring 2015.
- Presented at a Center for the Enhancement of Engineering Diversity (CEED) Hypatia (female living learning community) First Year Seminar, Fall 2014.
- Interacted with and answered questions about my research from freshmen from the College of Engineering and College of Science at two Slush Rush events in College of Engineering's residential community called inVenTs, Spring 2014, Fall 2014.
- Lab tours for CS/ECE Spring Mentoring Program, Event: "Technical Opportunities on Campus" for first year engineering female students, Spring 2014.
- Seminar and participation at two informal lunches, Fall 2013
  Student Transition Engineering Program (STEP): Center for the Enhancement of Engineering Diversity (CEED) summer bridge program for incoming engineering students
- Mentored an undergraduate student in a research project, Fall 2013
  Scieneering program: an innovative undergraduate program at Virginia Tech focused on interdisciplinary research and academic study at the intersection of science, engineering and law

PRESS COVERAGE (Not updated since 2019)

2019, Our work on Fashion++, an AI tool that recommends minimal edits to an outfit to make it more fashionable, was covered in Vogue Business, VentureBeat, and over a dozen other outlets.

- Vogue Business (https://www.voguebusiness.com/technology/facebook-ai-fashion-styling)
- VentureBeat (https://venturebeat.com/2019/09/18/fashion-uses-ai-to-make-unfashionable-outfits-stylish-with-minimal-tweaks/)

2019, I was featured in Vogue's "Dream Makers. How the women in AI are shaping our future."

- Vogue (https://www.vogue.com/projects/13548844/women-in-ai/)

2018, Our work on teaching bots to navigate New York City using natural language was covered in MIT Technology Review, Forbes, Fast Company, New Scientist, TechCrunch, The Verge, and others.

- MIT Technology Review (https://www.technologyreview.com/s/611629/facebooks-ai-tourist-finds-its-way-around-new-york-city-by-asking-for-help-from-another/)
- Forbes (https://www.forbes.com/sites/samshead/2018/07/12/facebook-aims-to-help-machines-understand-language-with-talk-the-walk-project/#388e4fe0c55d)
- Fast Company (https://www.fastcompany.com/90200229/facebook-taught-bots-to-navigate-new-york-city-using-natural-language)
- New Scientist (https://www.newscientist.com/article/2173918-facebooks-ai-tourist-learns-to-navigate-new-york-by-asking-directions/)
- TechCrunch (https://techcrunch.com/2018/07/11/facebooks-ai-researchers-task-tourist-bots-with-finding-their-way-in-nyc/)
- The Verge (https://www.theverge.com/2018/7/11/17560442/facebook-fair-ai-research-virtual-tourist-embodied-learning)

2018, Our work on Embodied Question Answering (Embodied QA), a first step towards agents that can see, talk, and reason, was covered in MIT Technology Review, and others.

- MIT Technology Review (https://www.technologyreview.com/s/611040/facebook-helped-create-an-ai-scavenger-hunt-that-could-lead-to-the-first-useful-home-robots/)

2017 50+ articles on our work on training AI bots to negotiate, including:

- CNN http://money.cnn.com/2017/06/14/technology/future/facebook-chatbot-negotiate/index.html
- Fast Company https://www.fastcompany.com/40430548/bad-at-negotiating-facebook-is-working-on-bots-that-can-do-it-for-you
- TechCrunch https://techcrunch.com/2017/06/14/facebook-teaches-machines-to-negotiate-with-humans/
- Quartz https://qz.com/1004070/facebook-fb-built-an-ai-system-that-learned-to-lie-to-get-what-it-wants/
- The Verge https://www.theverge.com/2017/6/14/15799068/chatbot-negotiations-ai-facebook-fair
- New Scientist https://www.newscientist.com/article/mg23431304-300-chatbots-learn-how-to-drive-a-hard-bargain/

2017 Forbes' list of 20 "Incredible Women Advancing A.I. Research"

- Forbes https://www.forbes.com/sites/mariyayao/2017/05/18/meet-20-incredible-women-advancing-a-i-research/#2ffdbf8326f9

2017 Featured news story about my Google Faculty Research Award and Dhruv Batra's Office of Naval Research (ONR) Young Investigator Program (YIP) award

- Georgia Tech's College of Computing (http://www.cc.gatech.edu/news/588083/pair-ic-assistant-professors-earn-awards-research-visual-question-answering)

2017 Featured news story about my Amazon Academic Research Award

- Georgia Tech's College of Computing (http://www.cc.gatech.edu/news/586463/amazon-research-awards-fund-computer-vision-and-machine-learning-projects)

2016 Our work on comparing where humans and machines look when answering questions about images

- MIT Technology Review (https://www.technologyreview.com/s/601819/ai-is-learning-to-see-the-world-but-not-the-way-humans-do/)
- New Scientist (https://www.newscientist.com/article/2095616-robot-eyes-and-humans-fix-on-different-things-to-decode-a-scene/)

- The Verge (http://www.theverge.com/2016/7/12/12158238/first-click-deep-learning-algorithmic-black-boxes)

2016 Dhruv Batra's and my interview on our Visual Question Answering (VQA) project
- WVTF/Radio IQ (http://wvtf.org/post/giant-leap-machine-kind-when-robots-can-see)

2016 Our work on understanding and predicting visual humor
- MIT Technology Review (http://www.technologyreview.com/view/545316/ai-algorithm-identifies-humorous-pictures/)
- Newsweek (http://www.newsweek.com/artificial-intelligence-algorithm-taught-recognise-humor-413832?rx=us)
- Virgina Tech's Bradley Department of Electrical and Computer Engineering (https://www.ece.vt.edu/news/articles/coding-jokes-virginia-tech-research-team-tackles-the-algorithm-of-humor.html)

2016 Featured news stories about my National Science Foundation (NSF) CAREER Award
- Virginia Tech's Bradley Department of Electrical and Computer Engineering (https://www.ece.vt.edu/news/articles/parikh-wins-nsf-career-award.html)
- Virginia Tech's College of Engineering (https://www.vtnews.vt.edu/articles/2016/02/022216-engineering-parikhnsfcareer.html)

2015 Our work on Visual Question Answering (VQA) in "What's in This Picture? AI Becomes as Smart as a Toddler"
- Bloomberg Business (http://www.bloomberg.com/news/articles/2015-05-22/what-s-in-this-picture-ai-becomes-as-smart-as-a-toddler)

2014 Featured news stories about my Allen Distinguished Investigator Awards in Artificial Intelligence from the Paul G. Allen Family Foundation
- GeekWire (http://www.geekwire.com/2014/paul-allen-gives-5-7m-cutting-edge-artificial-intelligence-researchers/)
- InTheCapital (http://inthecapital.streetwise.co/2014/12/04/a-virginia-tech-professor-got-1m-to-improve-artificial-intelligence/)
- Gigaom (https://gigaom.com/2014/12/03/allen-foundation-gives-millions-to-teach-machines-common-sense/)
- Virginia Tech (http://www.vtnews.vt.edu/articles/2014/12/120414-ictas-paulallenaward.html)

2014 "Can cartoons be used to teach machines to understand the visual world?"
- Newswise (http://www.newswise.com/articles/view/623754/)
- AlphaGalileo (http://www.alphagalileo.org/ViewItem.aspx?ItemId=145716&CultureCode=en)
- ECN (http://www.ecnmag.com/news/2014/09/can-cartoons-be-used-teach-machines-understand-visual-world)
- EurekAlert (http://www.eurekalert.org/pub_releases/2014-09/vt-ccb092614.php)
- 4-traders (http://www.4-traders.com/news/Can-cartoons-be-used-to-teach-machines-to-understand-the-visual-world--19159475/)

2014 Featured news stories about my Google Faculty Research Award
- American Society for Engineering Education (ASEE) *Prism* November 2014 issue (http://www.asee-prism.org/first-look-nov-2/)
- 4-traders (http://www.4-traders.com/GOOGLE-INC-C-16118013/news/GOOGLE-C--Devi-Parikh-Receives-Innovative-Google-Faculty-Research-Award-19168358/)
- Virginia Tech (http://www.vtnews.vt.edu/articles/2014/10/100914-engineering-parikhgoogleaward.html)
- Virginia Tech's College of Engineering (https://www.eng.vt.edu/news/devi-parikh-receives-innovative-google-faculty-research-award)

- Virginia Tech's Bradley Department of Electrical and Computer Engineering (http://www.ece.vt.edu/news/articles/Parikh-Google-Faculty-Award)

2014 Featured news stories about my Army Research Office (ARO) Young Investigator Program (YIP) Award

- Virginia Tech (http://www.vtnews.vt.edu/articles/2014/04/041714-engineering-deviparikharmyaward.html)
- Virginia Tech's College of Engineering (http://www.vtnews.vt.edu/articles/2014/04/041714-engineering-deviparikharmyaward.html)
- Virginia Center for Autonomous System (http://www.unmanned.vt.edu/news/2014/computer-vision-feedback.html)

2013 Profile on my research

- Virginia Tech's Bradley Department of Electrical and Computer Engineering (http://www.ece.vt.edu/news/ar13/crowdsourcing_computer_vision.php)

ADVISING ACTIVITY

Past Graduate Advisees

- Gunjan Aggarwal
  M.S. student, Spring 2023
  Next position: Applied Research Scientist (Generative AI), Adobe

- Harsh Maheshwari
  M.S. student, Spring 2023
  Next position: Research Engineer, Avataar

- Samyak Datta
  Ph.D. student, Spring 2022
  Next position: Research Scientist at Meta

- Ayush Shrivastava
  M.S. student, Spring 2021
  Next position: Ph.D. student at University of Michigan

- Sashank Gondala
  M.S. student, Spring 2021
  Next position: Apple

- Purva Tendulkar
  M.S. student, Spring 2020
  Next position: Visiting Researcher at UCSD

- Alice Li
  M.S. student, Spring 2020

- Ramprasaath Selvaraju
  Ph.D. student, Spring 2020
  Next position: Salesforce Research

- Jianwei Yang
  Ph.D. student, Spring 2020
  Next position: Microsoft Research

- Jiasen Lu
  Ph.D. student, Spring 2020
  Next position: Allen Institute for AI (AI2)

- Vishvak Murahari
  M.S. student, Spring 2020
  Next position: Ph.D. student at Princeton University

- Arjun Chandrasekaran
  Ph.D. student, Fall 2019
  Next position: Postdoctoral researcher at MPI in Tübingen (Germany)

- Viraj Prabhu
  M.S. student, Spring 2019
  Next position: Ph.D. student at Georgia Tech

- Prithvijit Chattopadhyay
  M.S. student, Spring 2019
  Next position: Ph.D. student at Georgia Tech

- Ramakrishna Vedantam
  Ph.D. Fall 2019
  Next position: Facebook AI Research

- Peng Zhang
  Ph.D. Fall 2017
  Next position: Amazon

- Xiao Lin
  Ph.D. Fall 2017
  Next position: SRI International

- Arijit Ray
  M.S. Spring 2017
  Next position: SRI International

- Stanislaw Antol
  M.S. Spring 2014
  Next position: Samsung Research America

- Shrenik Lad
  M.S. Spring 2015
  Next position: Google

- Lisa Anders (co-advised)
  M.S. Spring 2014
  Next position: Texas Instruments (TI)

Past Graduate Interns

- Abhinav Moudgil, IIIT Hyderabad
  Spring 2020 – Fall 2021

- Yash Kant, IIT Roorkee

Fall 2019 – Spring 2021

- Sarmista Velury, Georgia Tech
  Summer 2020
- Mohit Sharma, Purdue University
  Academic year 2018-2019
- Varun Manjunatha, University of Maryland
  Summer 2015
- Ram Prasaath Selvaraju, BITS-Pilani Hyderabad
  Spring 2015
- Mayu Sakurada, University of Tokyo
  Fall 2014
- Mainak Jas, Aalto University
  Spring 2014
- Stanislaw Antol, Virginia Tech
  Fall 2013
- Xiao Lin, Virginia Tech
  Summer 2013
- Micah Hadosh, University of Illinois at Urbana Champaign (UIUC)
  Summer 2013
- Arijit Biswas, University of Maryland
  Spring 2012
- Roozbeh Mottaghi, University of California Los Angeles (UCLA)
  Spring 2012
- Kun Duan, Indiana University
  Summer 2011

Past Undergraduate Interns

- Karan Desai, IIT Roorkee
  Academic year 2018-2019
- Prithvijit Chattopadhyay, Delhi Technological University
  Summer 2015, Fall 2016-Spring 2017
- Tanmay Batra, IIT-Delhi
  Fall 2014-Spring 2015
- Franklin Zheng
  Since Spring 2014
- Rishabh Raj, IIIT Hyderabad
  Summer 2014

- Alexzander Williams, Virginia Tech
  Fall 2013 (Scieneering Program)

- Manuel Arturo Deza Figueroa, Universidad Nacional de Ingenieria, Peru
  Summer 2013

- Naman Agrawal, Indian Institute of Technology, Kharagpur
  Summer 2013

- Naman Turakhia, DA-IICT Gandhinagar
  Spring 2013

- Jiuling Wang, Zhejiang University
  Fall 2012, Undergraduate project: Spring 2013

- Aayush Bansal
  Spring 2012, 2013; Intern: Fall 2012

- Abhiram Nukalapati**,** University of Illinois at Urbana Champaign (UIUC)
  Fall 2011

- Amar Parkash**,** Indraprastha Institute of Information Technology, Delhi
  Summer 2011, Undergraduate project: Fall 2011, Spring 2012

- Yash Seth, Indraprastha Institute of Information Technology, Delhi
  Summer 2011, Undergraduate project: Fall 2011, Spring 2012

Past Undergraduate Interns

- Micah Reich
  Summer 2020