Yash Goyal yashgoyal.yg1@gmail.com https://yash-goyal.github.io/

WORK EXPERIENCE

Research Scientist 2020 - Present

Samsung Advanced Institute of Technology (SAIT) AI Lab, Montreal, Quebec, Canada

EDUCATION

Ph.D. in Computer Science 2017 - 2020

Georgia Tech, Atlanta, GA, USA Advised by: Dhruv Batra

Ph.D. in Computer Engineering 2014 - 2017

Virginia Tech, Blacksburg, VA, USA

Advised by: Dhruv Batra

Transferred to Georgia Tech with advisor

Bachelor of Technology (B. Tech.) in Electrical Engineering 2010 - 2014

Indian Institute of Technology Gandhinagar, Gujarat, India

with Honors, and Minor in Computer Science and Engineering GPA: 9.33/10

RESEARCH INTERNSHIPS

Google Brain, Mountain View, CA, USA Spring & Summer 2019

Mentors: Been Kim, Uri Shalit

Facebook AI Research, Menlo Park, CA, USA Spring & Summer 2017

Mentors: Dhruv Batra, Anitha Kannan, Devi Parikh

Army Research Lab, Adelphi, MD, USA Summer 2015

Mentor: Douglas Summers-Stay

SIGNIFICANT ACADEMIC ACTIVITIES

- Reviewer for CVPR, NeurIPS, ICCV, ECCV, ICLR, ICML, TMLR, ACL RR, TPAMI, ACM TOMM.
- Co-organizer of the Vision Language Models For All: Building Geo-Diverse and Culturally Aware Vision-Language Models Workshop at CVPR 2025.

- Co-organizer of the Visual Question Answering Challenge 2017-2021.
- Co-organizer of the Visual Question Answering Workshop at CVPR 2016-2019.

HONORS AND AWARDS

• Outstanding Reviewer, ICLR	2021
• Outstanding Reviewer, CVPR	2019
• Outstanding Reviewer, CVPR	2018
• Best Student Paper, Workshop on Visualization for Deep Learning, ICM	L 2016
(Awarded for Towards Transparent AI Systems: Interpreting Visual Question Answering Models)	
• Registration Fee Waiver Award, Deep Learning Summer School, Montrea	al, Canada 2016
• Dean's List for academic excellence, IIT Gandhinagar	2011, 2012, 2013, 2014
• S.P. Mehrotra scholarship, IIT Gandhinagar	2011-12

PUBLICATIONS [Google Scholar][arXiv]

• Merit-cum-Means scholarship, IIT Gandhinagar

• Xiaofeng Zhang, Michelle Lin, Simon Lacoste-Julien, Aaron Courville, <u>Yash Goyal</u>. "Bias Analysis in Unconditional Image Generative Models", *ArXiv*, 2025.

2010-11, 2012-13, 2013-14

- Shravan Nayak, Mehar Bhatia, Xiaofeng Zhang, Verena Rieser, Lisa Anne Hendricks, Sjoerd van Steenkiste, <u>Yash Goyal</u>, Karolina Stańczak, Aishwarya Agrawal. "CulturalFrames: Assessing Cultural Expectation Alignment in Text-to-Image Models and Evaluation Metrics", *ArXiv*, 2025.
- Oscar Manas, Pau Rodriguez*, Saba Ahmadi*, Aida Nematzadeh, Yash Goyal, Aishwarya Agrawal. "MAPL: Parameter-Efficient Adaptation of Unimodal Pre-Trained Models for Vision-Language Few-Shot Prompting", The European Chapter of the Association for Computational Linguistics (EACL), 2023.

 *equal contribution
- Benno Krojer, Vaibhav Adlakha, Vibhav Vineet, <u>Yash Goyal</u>, Edoardo Ponti, Siva Reddy. "Image Retrieval from Contextual Descriptions", Association for Computational Linguistics (ACL), 2022.
- William Ferguson, Dhruv Batra, Raymond Mooney, Devi Parikh, Antonio Torralba, David Bau, David Diller, Josh Fasching, Jaden Fiotto-Kaufman, Yash Goyal, Jeff Miller, Kerry Moffitt, Alex Montes de Oca, Ramprasaath R Selvaraju, Ayush Shrivastava, Jialin Wu, Stefan Lee. "Reframing explanation as an interactive medium: The EQUAS (Explainable QUestion Answering System) project", Applied AI Letters, 2021.
- Yash Goyal, Amir Feder, Uri Shalit, Been Kim. "Explaining Classifiers with Causal Concept Effect (CaCE)", ArXiv, 2019.
- Yash Goyal, Ziyan Wu, Jan Ernst, Dhruv Batra, Devi Parikh, Stefan Lee. "Counterfactual Visual Explanations", International Conference on Machine Learning (ICML), 2019.

- Yash Goyal, Tejas Khot, Aishwarya Agrawal, Douglas Summers-Stay, Dhruv Batra, Devi Parikh. "Making the V in VQA Matter: Elevating the Role of Image Understanding in Visual Question Answering", International Journal of Computer Vision (IJCV), 2018.
- Gordon Christie*, Ankit Laddha*, Aishwarya Agrawal, Stanislaw Antol, <u>Yash Goyal</u>, Kevin Kochersberger, Dhruv Batra. "Resolving Language and Vision Ambiguities Together: Joint Segmentation & Prepositional Attachment Resolution in Captioned Scenes", *Journal of Computer Vision and Image Understanding (CVIU)*, 2017.

 *equal contribution
- Yash Goyal*, Tejas Khot*, Douglas Summers-Stay, Dhruv Batra, Devi Parikh. "Making the Vin VQA Matter: Elevating the Role of Image Understanding in Visual Question Answering", Conference on Computer Vision and Pattern Recognition (CVPR), 2017. *equal contribution
- Gordon Christie*, Ankit Laddha*, Aishwarya Agrawal, Stanislaw Antol, <u>Yash Goyal</u>, Kevin Kochersberger, Dhruv Batra. "Resolving Language and Vision Ambiguities Together: Joint Segmentation & Prepositional Attachment Resolution in Captioned Scenes", Conference on Empirical Methods in Natural Language Processing (EMNLP), 2016.

 *equal contribution
- Yash Goyal, Akrit Mohapatra, Devi Parikh, Dhruv Batra. "Towards Transparent AI Systems: Interpreting Visual Question Answering Models", International Conference on Machine Learning (ICML) Workshop on Visualization for Deep Learning (Best Student Paper), 2016.
- Peng Zhang*, Yash Goyal*, Douglas Summers-Stay, Dhruv Batra, Devi Parikh. "Yin and Yang: Balancing and Answering Binary Visual Questions", Conference on Computer Vision and Pattern Recognition (CVPR), 2016.

 *equal contribution
- Harsh Agrawal, Clint Solomon Mathialagan, Yash Goyal, Neelima Chavali, Prakriti Banik, Akrit Mohapatra, Ahmed Osman, Dhruv Batra. "CloudCV: Large-Scale Distributed Computer Vision as a Cloud Service", Book Chapter, Mobile Cloud Visual Media Computing. Editors: Gang Hua, Xian-Sheng Hua. Springer, 2015.
- Yash Goyal, Harsh Agrawal, Clint Solomon, Dhruv Batra. "Fast Addition of New Classes to a Pre-trained ConvNet", Mid-Atlantic Computer Vision (MACV) Workshop, 2015.
- Deepesh Kumar, Yash Goyal, Sunil Nair, Arvind Chauhan, Uttama Lahiri. "Design of a Physiologically Informed Virtual Reality based Interactive Platform for Individuals with Upper Limb Impairment", *IEEE International System on Robot and Human Interactive Communication (Ro-MAN)*, 2014.

TALKS

- "Counterfactual Visual Explanations", International Conference on Machine Learning (ICML), 2019. [Video (1:04:00 1:08:25)]
- "Counterfactual Visual Explanations", Human In the Loop Learning (HILL) Workshop, ICML, 2019. [Video (34:09 38:38)]

- "Counterfactual Visual Explanations", Explainable AI Workshop, CVPR, 2019.
- "The Visual Question Answering Challenge", Special Session: Workshop Competitions, CVPR, 2018. [Video (1:06:29 1:11:40)]
- "Visual Question Answering Challenge 2018: Overview of Challenge, Winner Announcements, and Analysis of Results", VQA Challenge and Visual Dialog Workshop, CVPR, 2018. [Video]
- "Visual Question Answering Challenge 2017: Overview of Dataset, Challenge, Winner Announcements, and Analysis of Results", VQA Challenge Workshop, CVPR, 2017. [Video (38:38 47:12)]
- "Towards Transparent Visual Question Answering Systems", Visualization for Deep Learning Workshop, ICML, 2016. [Video]
- "Yin and Yang: Balancing and Answering Binary Visual Questions", *Mid-Atlantic Computer Vision (MACV) Workshop*, 2016.