Revant Teotia

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EDUCATION

Columbia University   New York, NY
M.S. in Computer Science, GPA 4.12/4.33   *Expected Dec 2022*

Indian Institute Of Technology Kanpur   Kanpur, India
B.Tech. in Computer Science and Engineering, GPA 8.4/10   *May 2017*

PUBLICATIONS

- Doubly Right Object Recognition,
  Revant Teotia, Chengzhi Mao, Carl Vondrick,
  ICML 2022 Workshop on Spurious Correlations, Invariance, and Stability (**Spotlight talk, among top-5 papers**)

- Finding Spuriously Correlated Visual Attributes,
  Revant Teotia, Chengzhi Mao, Carl Vondrick,
  ICML 2022 Workshop on Spurious Correlations, Invariance, and Stability

- Few-shot Visual Relationship Co-localization,
  Revant Teotia, Vaibhav Mishra, Mayank Maheshwari, Anand Mishra,
  ICCV 2021   [paper][project page][code]

- Realtime Indoor Workout Analysis Using Machine Learning & Computer Vision,
  Amit Nagarkoti, **Revant Teotia**, Amith K. Mahale, and Pankaj K. Das,
  IEEE EMBC 2019   [paper]

TECHNICAL SKILLS

Python, PyTorch, PyTorch Geometric, NumPy, Latex, OpenCV, Git, C/C++

EXPERIENCE

Computer Science Department, Columbia University   New York, NY
Graduate Research Assistant in Carl Vondrick's group   *Sep 2021 - Present*

- Working on making deep learning based imaged classification models explainable using object attributes.
- Working on human body language understanding from unlabelled videos.

Indian Institute of Technology Jodhpur   Jodhpur, India
Research Assistant in Anand Mishra's Vision, Language, and Learning Group (VL2G)   *Jul 2020 - Aug 2021*

- Analyzed novel problem of Visual Relationship Co-localization and invented a meta-learning based optimization
  framework to solve it in a few-shot manner. Published in ICCV 2021.   [paper][project page][code]
- Developed a novel multimodal-transformer architecture in PyTorch for external knowledge-aware image retrieval and
  generated a custom dataset of 15k images - 45k queries for its training. Currently under review.

Samsung R&D Institute   Bangalore, India
Senior Software Engineer, Samsung Health Team   *Jul 2017 - Jul 2019*

- Designed and developed the C++ modules of BLE/NFC communication between Samsung smartwatch and gym fitness
  equipments. Announced at CES2020 and is enjoyed by millions of Samsung smartwatch users.   [news]
- Created a home workout video analysis system using CNN-based human pose-estimation, Optical Flow and Dynamic
  Time Warping algorithm. Published in IEEE EMBC 2019.   [paper]