

Purva Tendulkar

Education

Columbia University, New York, NY PhD, Computer Science Advisor: Carl Vondrick GPA: 4.0/4.0	2021 – Present
Georgia Institute of Technology, Atlanta, GA M.S, Computer Science Advisor: Devi Parikh GPA: 4.0/4.0	2018 – 2020
College of Engineering Pune, Maharashtra, India B.Tech, Computer Science GPA: 9.14/10	2014 – 2018

Awards

Sponsored attendee at, NSF-funded CRA Graduate Cohort for Women	2021
Columbia University Ph.D. Presidential Fellowship	2021-25
Best Presentation Award, at ICCV 2019	2019
Pratibha Eaton Excellence Award for Women	2017

Publications

Preprints

8. **FLEX: Full-Body Grasping Without Full-Body Grasps**
Purva Tendulkar, Dídac Surís, Carl Vondrick
arXiv 2022
7. **Landscape Learning for Neural Network Inversion**
Ruoshi Liu, Chengzhi Mao, Purva Tendulkar, Hao Wang, Carl Vondrick
arXiv 2022

Conference Papers

6. **Revealing Occlusions with 4D Neural Fields**
Basile Van Hoorick, Purva Tendulkar, Dídac Surís, Dennis Park, Simon Stent, Carl Vondrick
Conference on Computer Vision and Pattern Recognition (CVPR) 2022, **Oral (top-4%)**
5. **SORT-ing VQA Models: Contrastive Gradient Learning for Improved Consistency**
Sameer Dharur, Purva Tendulkar, Dhruv Batra, Devi Parikh, Ramprasaath R. Selvaraju
Conference of the North American Chapter of the Association for Computational Linguistics (NAACL) 2021
4. **Feel The Music: Automatically Generating A Dance For An Input Song**
Purva Tendulkar, Abhishek Das, Aniruddha Kembhavi, Devi Parikh
International Conference on Computational Creativity (ICCC) 2020, **Oral**
3. **SQuINTing at VQA Models: Interrogating VQA Models with Sub-Questions**
Ramprasaath R. Selvaraju, Purva Tendulkar, Devi Parikh, Eric Horvitz, Marco Tulio Ribeiro, Besmira Nushi, Ece Kamar
Conference on Computer Vision and Pattern Recognition (CVPR) 2020, **Oral (top-5.7%)**
2. **Trick or TReAT: Thematic Reinforcement for Artistic Typography**
Purva Tendulkar, Kalpesh Krishna, Ramprasaath R. Selvaraju, Devi Parikh
International Conference on Computational Creativity (ICCC) 2019, **Oral - Best Presentation Award**

Workshop

1. SOrT-ing VQA Models: Contrastive Gradient Learning for Improved Consistency

Sameer Dharur, Purva Tendulkar, Dhruv Batra, Devi Parikh, Ramprasaath R. Selvaraju

Workshop on Interpretable Inductive Biases and Physically Structured Learning at NeurIPS 2020

Work Experience

Columbia University , <i>Graduate Research Assistant</i> with Carl Vondrick	2021-present
University of California San Diego , <i>Visiting Researcher</i> with Xiaolong Wang	Fall '20, Spring '21
Georgia Tech , <i>Graduate Research Assistant</i> with Devi Parikh	2018-2020
AiBee , <i>Research Intern</i> with Chunhui Wu, Juan Carlos Niebles, Silvio Savarese	Summer '19
Nanyang Technological University , <i>Research Intern</i> with Arvind Easwaran	Summer '17
Indian Institute of Technology (IIT), Bombay , <i>Software Engineer Intern</i> with Varsha Apte	Summer '16

Selected Press Coverage

Facebooks new choreography AI is a dancing queen

by Andrew Tarantola. Engadget. June 2020

AI like the way you move: How Facebook researchers built an inspirational dancing machine

by Tech at Meta. August 2020

Teaching Experience

Columbia CS 6998: Representation Learning	Fall '21, '22
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Talks

Feel The Music: Automatically Generating A Dance For An Input Song ICCC'20 Oral Talk	2020
Trick or TReAT: Thematic Reinforcement for Artistic Typography ICCC'19 Oral Talk	2019

Professional Activities

Reviewing

International Conference on Computer Vision (ICCV)	2021
European Conference on Computer Vision (ECCV)	2022

Advising

Scott Geng, Undergraduate Student, Columbia	2022 - Present
Macarena Peralta, Undergraduate Student, UMich (Amazon SURE program)	Summer 2022
Five females, Undergraduate Students, Barnard (BEARS program)	Spring 2022
Three females, Undergraduate Students, Columbia (WISC program)	2021 - 2022

Extracurricular Activities

- Co-organizing a bi-weekly research seminar series "Vision, Interaction, Graphics & Robotics (VIGR)" at Columbia.
- Received 3rd prize in the CS department for my undergraduate thesis on speeding up image dehazing algorithms.

- Completed Sangeet Visharad or Bachelor of Arts (BA) in Indian (Hindustani) Classical Music in harmonium instrument.
- Completed Arangetram in an Indian Classical Dance form called Bharatnatyam.
- Competed at the final round of the National British Parliamentary Debate Competition organized by Symbiosis Law School (SLS) in 2016.