Purva Tendulkar

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Education

Columbia University, *New York, NY*   2021 – Present
PhD, Computer Science
Advisor: Carl Vondrick
GPA: 4.04/4.0

Georgia Institute of Technology, *Atlanta, GA*   2018 – 2020
M.S, Computer Science
Advisor: Devi Parikh
GPA: 4.0/4.0

College of Engineering Pune, *Maharashtra, India*   2014 – 2018
B.Tech, Computer Science
GPA: 9.14/10

Awards

Apple Ph.D. Scholar in AI/ML   2024 - 26
Sponsored attendee at CRA-WP, *Grad Cohort for Women*   2022
Columbia University Ph.D. Presidential Fellowship   2021 - 25
Best Presentation Award, *at ICCC 2019*   2019
Pratibha Eaton Excellence Award for Women   2017

Publications

Conference Papers

9. **Landscape Learning for Neural Network Inversion**
   Ruoshi Liu, Chengzhi Mao, <u>Purva Tendulkar</u>, Hao Wang, Carl Vondrick
   International Conference on Computer Vision (ICCV) 2023

8. **FLEX: Full-Body Grasping Without Full-Body Grasps**
   <u>Purva Tendulkar</u>, Dídac Surís, Carl Vondrick
   Conference on Computer Vision and Pattern Recognition (CVPR) 2023

7. **Revealing Occlusions with 4D Neural Fields**
   Basile Van Hoorick, <u>Purva Tendulkar</u>, Dídac Surís, Dennis Park, Simon Stent, Carl Vondrick
   Conference on Computer Vision and Pattern Recognition (CVPR) 2022, **Oral (top-4%)**

6. **SOrT-ing VQA Models: Contrastive Gradient Learning for Improved Consistency**
   Sameer Dharur, <u>Purva Tendulkar</u>, Dhruv Batra, Devi Parikh, Ramprasaath R. Selvaraju
   Conference of the North American Chapter of the Association for Computational Linguistics (NAACL) 2021

5. **Feel The Music: Automatically Generating A Dance For An Input Song**
   <u>Purva Tendulkar</u>, Abhishek Das, Aniruddha Kembhavi, Devi Parikh
   International Conference on Computational Creativity (ICCC) 2020, **Oral**

4. **SQuINTing at VQA Models: Interrogating VQA Models with Sub-Questions**
   Ramprasaath R. Selvaraju, <u>Purva Tendulkar</u>, Devi Parikh, Eric Horvitz, Marco Tulio Ribeiro, Besmira Nushi, Ece Kamar
   Conference on Computer Vision and Pattern Recognition (CVPR) 2020, **Oral (top-5.7%)**

3. **Trick or TReAT: Thematic Reinforcement for Artistic Typography**
   <u>Purva Tendulkar</u>, Kalpesh Krishna, Ramprasaath R. Selvaraju, Devi Parikh
   International Conference on Computational Creativity (ICCC) 2019, **Oral - Best Presentation Award**

Preprints

2. **Discovering Differences in Facial Expressions**
   Sumit Sarin, Utkarsh Mall, <u>Purva Tendulkar</u>, Carl Vondrick
   Pre-print 2024

1. **Affective Faces for Goal-Driven Dyadic Communication**
   Scott Geng*, Revant Teotia*, <u>Purva Tendulkar</u>, Sachit Menon, Carl Vondrick
   Pre-print 2023

Work Experience

Columbia University, *Graduate Research Assistant*   2021 - Present
with Carl Vondrick

University of Tübingen, *Visiting PhD Student*   Summer '24
with Gerard Pons-Moll

Meta Reality Labs, *Research Scientist Intern*   Summer '23
with Weipeng Xu

University of California San Diego, *Visiting Researcher*   Fall '20, Spring
with Xiaolong Wang   '21

Georgia Tech, *Graduate Research Assistant*   2018 - 2020
with Devi Parikh

AiBee, *Research Intern*   Summer '19
with Chunhui Wu, Juan Carlos Niebles, Silvio Savarese

Nanyang Technological University, *Research Intern*   Summer '17
with Arvind Easwaran

Indian Institute of Technology (IIT), Bombay, *Software Engineer Intern*   Summer '16
with Varsha Apte

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

Talks

Feel The Music: Automatically Generating A Dance For An Input Song   2020
ICCC'20 Oral Talk

Trick or TReAT: Thematic Reinforcement for Artistic Typography   2019
ICCC'19 Oral Talk

Professional Activities

Reviewing
ECCV'24, CVPR'24, SIGGRAPH'23, ICCV'23, ECCV'22, ICCV'21

Invited Panels
Served as a panelist for the Graduate Society of Women Engineers (GradSWE) at Columbia   March '23
Served as a panelist for The Coding with Empathy Challenge at Empatico   April '23

Teaching Experience

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

Advising & Mentorship

Sumit Sarin, Masters Student, Columbia   Fall '23 - Present

Yuechen Wang, Masters Student, Columbia   Fall '23 - Present

Iris Xue, Undergraduate Student, Columbia   Fall '23 - Present

Revant Teotia, Masters Student, Columbia (next: PhD student at NYU)   Spring'23

Scott Geng, Undergraduate Student, Columbia (next: PhD student at UW)   Fall '22

Macarena Peralta, Undergraduate Student, UMich (Amazon SURE)   Summer '22

Five females, Undergraduate Students, Barnard (BEARS)   Spring '22

Six females, Undergraduate Students, Columbia (WISC)   2021 - 2023

References

○ Carl Vondrick (vondrick@cs.columbia.edu)

○ Gerard Pons-Moll (gerard.pons-moll@uni-tuebingen.de)

○ Weipeng Xu (xuweipeng@meta.com)

○ Devi Parikh (parikh@gatech.edu)