# Purva Tendulkar

☐ +1 (470)-685-4550

✓ pt2578@columbia.edu

→ purvaten.github.io

## Education

Columbia University, New York, NY

PhD, Computer Science
Advisor: Carl Vondrick
GPA: 4.0/4.0

Georgia Institute of Technology, Atlanta, GA

M.S, Computer Science
Advisor: Devi Parikh
GPA: 4.0/4.0

College of Engineering Pune, Maharashtra, India

B.Tech, Computer Science
GPA: 9.14/10

## **Awards**

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

## **Publications**

## **Preprints**

### 9. FLEX: Full-Body Grasping Without Full-Body Grasps

<u>Purva Tendulkar</u>, Dídac Surís, Carl Vondrick Pre-print 2022

8. Affective Faces for Goal-Driven Dyadic Communication Scott Geng, Revant Teotia, <u>Purva Tendulkar</u>, Sachit Menon, Carl Vondrick Pre-print 2022

### 7. Landscape Learning for Neural Network Inversion

Ruoshi Liu, Chengzhi Mao, <u>Purva Tendulkar</u>, Hao Wang, Carl Vondrick Pre-print 2022

### Conference Papers

### 6. 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%)** 

### 5. 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

### 4. 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** 

### 3. 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%)

# 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

## Workshop

SOrT-ing VQA Models: Contrastive Gradient Learning for Improved Consistency
 Sameer Dharur, <u>Purva Tendulkar</u>, Dhruv Batra, Devi Parikh, Ramprasaath R. Selvaraju
 Workshop on Interpretable Inductive Biases and Physically Structured Learning at NeurIPS 2020

# Work Experience

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

# Selected Press Coverage

Facebooks new choreography AI is a dancing queen

by Andrew Tarantola. Engadget. June 2020

Al 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
---	----------	-------

# **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

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

- o Co-organizing a bi-weekly research seminar series "Vision, Interaction, Graphics & Robotics (VIGR)" at Columbia.
- o Received 3rd prize in the CS department for my undergraduate thesis on speeding up image dehazing algorithms.
- o Completed Sangeet Visharad or Bachelor of Arts (BA) in Indian (Hindustani) Classical Music in harmonium instrument.
- o 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.