

# Purva Tendulkar

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## Education

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

## Awards

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

## Publications

### Preprints

- FLEX: Full-Body Grasping Without Full-Body Grasps**  
Purva Tendulkar, Dídac Surís, Carl Vondrick  
Pre-print 2022
- Affective Faces for Goal-Driven Dyadic Communication**  
Scott Geng, Revant Teotia, Purva Tendulkar, Sachit Menon, Carl Vondrick  
Pre-print 2022
- Landscape Learning for Neural Network Inversion**  
Ruoshi Liu, Chengzhi Mao, Purva Tendulkar, Hao Wang, Carl Vondrick  
Pre-print 2022

### Conference Papers

- 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%)**
- 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
- 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**
- 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**, *Graduate Research Assistant*

with Carl Vondrick

2021-present

**University of California San Diego**, *Visiting Researcher*

with Xiaolong Wang

Fall '20,

Spring'21

**Georgia Tech**, *Graduate Research Assistant*

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

**Indian Institute of Technology (IIT), Bombay**, *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

**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

## 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.