Purva Tendulkar www.linkedin.com/in/purvaten ➤ purva@gatech.edu ↑ purvaten.github.io • www.github.com/purvaten RESEARCH Deep Learning, Computer Vision, Natural Language **INTERESTS** Creative AI, Music Information Retrieval **EDUCATION** School of Interactive Computing, Georgia Tech 2018-2020 M.S. in Computer Science Advised by Prof. Devi Parikh CGPA: 4.0/4.0College of Engineering Pune (COEP) 2014-2018 B. Tech. in Computer Science CGPA: 9.14/10.0PUBLICATIONS SOrT-ing VQA Models: Improving Consistency via Gradient Alignment Preprint (under review) S. Dharur, P. Tendulkar, D. Batra, D. Parikh, R. Selvaraju Feel The Music: Automatically Generating A Dance For An Input Song International Conference on Computational Creativity (ICCC) 2020 (Oral) P. Tendulkar, A. Das, A. Kembhavi, D. Parikh SQuINTing at VQA Models: Interrogating VQA Models with Sub-Questions IEEE Conference on Computer Vision and Pattern Recognition (CVPR) 2020 (Oral) R. Selvaraju, P. Tendulkar, D. Parikh, E. Horvitz, M. Ribeiro, B. Nushi, E. Kamar

Trick or TReAT: Thematic Reinforcement for Artistic Typography International Conference on Computational Creativity (ICCC) 2019 (Oral) P. Tendulkar, K. Krishna, R. Selvaraju, D. Parikh

AWARDS & RECOGNITION Finalist: Microsoft AI Residency Program & Facebook AI Residency Program (2020) (cancelled due to COVID-19)

Winner: Best Presentation Award at ICCC'19

Recipient: Pratibha Eaton Excellence Award for women engineering students (2017) Finalist: Computer and Science Quiz organized by Computer Society of India (2011)

Recipient: Maharashtra Talent Search Award (2009)

TECHNICAL SKILLS

Programming Languages: Python, C, C++, HTML, CSS, PHP, JavaScript Deep Learning Frameworks: PvTorch, TensorFlow

RELEVANT COURSES

Graduate Coursework

- Deep Learning Machine Learning Natural Language Processing
- Computer Vision Introduction to Graduate Algorithms

Selected Undergraduate Coursework

- Natural Language Processing Linear Algebra
- Experimental Design and Data Analysis Data Structures
- Design and Analysis of Algorithms Discrete Structures and Graph Theory
- Computer Algorithms in Signal Processing Advanced Unix Programming

EXPERIENCE

University of California, San Diego

Research Staff, mentored by Xiaolong Wang

Aug 2020-ongoing

Visual Intelligence Lab, Georgia Tech

Aug 2018-Aug 2020

Research Assistant, mentored by Devi Parikh

Worked on developing personable AI that humans can like, trust, teach and learn from – including creative AI, vision & language and reinforcement learning.

AiBee Corp, Palo Alto

May 2019-Aug 2019

Research Intern, mentored by Chunhui Gu and Juan Carlos Niebles

Worked on using recurrent neural networks to analyse trajectories of people in a shopping mall in order to detect events and perform intentions classification.

CPS Research Group, NTU

May 2017-Aug 2017

Research Assistant, mentored by Arvind Easwaran

Worked on analysing notorious security attacks on Cyber Physical Systems (CPSs) and performed extensive vulnerability analysis in order to improve system design.

IIT, Bombay May 2016-Aug 2016

Software Developer, mentored by Varsha Apte

Worked on EvalPro, a Django webapp being used in the CSE Department of IIT Bombay for handling computer related tests, assignments and automated evaluation.

SELECTED PROJECTS

Blind Image Dehazing

Mentored by Yuval Bahat and Kalpesh Krishna

Implemented the ICCP 2016 paper Blind Image Dehazing Using Internal Patch Recurrence. Improved the method for selecting pairs of image patches for blind dehazing as compared to the original brute force method. Achieved approximately 20x better speed for optimization in PyTorch as compared to the original MATLAB implementation.

Punny Captions

Implemented the NAACL 2018 paper Punny Captions : Witty Wordplay in Image Descriptions which generates punny captions for a boring image.

REFERENCES

- Prof. Devi Parikh, Georgia Tech (email: parikh@gatech.edu)
- Prof. Xiaolong Wang, UC San Diego (email: xiw012@ucsd.edu)
- Dr. Aniruddha Kembhavi, AI2 (email: anik@allenai.org)
- Dr. Chunhui Gu, AiBee Corp. (email: chgu@aibee.com)
- Dr. Juan Carlos Niebles, Stanford University (email: jniebles@cs.stanford.edu)
- Prof. Arvind Easwaran, NTU (email: arvinde@ntu.edu.sg)