Purva Tendulkar

www.linkedin.com/in/purvaten
www.github.com/purvaten
purva@gatech.edu
purvaten.github.io

RESEARCH INTERESTS
Deep Learning, Computer Vision, Natural Language
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 : 4.0/4.0

College of Engineering Pune (COEP) 2014-2018
B.Tech. in Computer Science
CGPA : 9.14/10.0

PUBLICATIONS

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: PyTorch, 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 Aug 2020-ongoing
Research Staff, mentored by Xiaolong Wang
Developing a deep learning based system which can model long-term dynamics of objects in Facebook's PHYRE environment, with applications to intuitive physics-simulation systems.

Georgia Institute of Technology Aug 2018-Aug 2020
Graduate Research Assistant, mentored by Devi Parikh
Developed personable AI including a creative application that can assist designers by automatically generating doodles given any input word and theme, and a dance application in which a user can provide any music as input to obtain dance visualizations which are synced to the beat and correlated to the music.

AiBee May 2019-Aug 2019
Research Intern, mentored by Chunhui Gu and Juan Carlos Niebles
Developed an LSTM-based model that can detect events based on trajectories of people in a shopping mall and learns to distinguish between staff and customers.

Nanyang Technological University, Singapore May 2017-Aug 2017
Research Assistant, mentored by Arvind Easwaran
Modeled an attack of Stuxnet – a notorious worm that affects Cyber-Physical Systems and performed extensive vulnerability analysis at different levels of abstraction in the Berkeley Metropolis environment.

Indian Institute of Technology May 2016-Aug 2016
Software Developer, mentored by Varsha Apte
Developed EvalPro - Django-based framework for automatically evaluating programming assignments of courses at IIT Bombay. Worked as a full-stack developer to add engaging features for both instructors and students.

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)