

# VASUDHA VARADARAJAN

Graduate Student at Stony Brook University | Natural Language Processing, Computational Social Science

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in vasevarad | vasevarad | Google Scholar

## EXPERIENCE

### Research Assistant

#### Stony Brook University

Dec 2020 – current | Stony Brook, NY

- Working on human-centric NLP techniques applied to social media, incorporating cognitive and psychological constructs.

### Data & Applied Scientist Intern

#### Microsoft

May 2022 – August 2022 | Bellevue, WA

- Exploring fairness in recommendation systems
- Using NLP to augment recommendation systems with pertinent information.

### Research Intern

#### AT&T Labs

May 2021 – July 2021 | Remote, New Jersey

- Applying NLP to Dark-web forum posts to understanding jargon used and to track posts with malicious intent.
- NLP to understand and classify ticket logs- free-text entries to better understand routine problems in the network.

### Teaching Assistant

#### Stony Brook University

Jan 2020 – Jan 2021 | Stony Brook, NY

- CSE306: Operating Systems (Spring 2020)
- CSE312: Legal and Ethical Issues in Information Systems (Fall 2020)

## AREAS OF INTEREST

- Natural Language Processing
- Data Science and Machine Learning
- Computational Social Science / Psychology

## SKILLS

Python

Tensorflow, Pytorch

Spark, Hadoop

C/C++

Java

Oracle, MongoDB

R



## PUBLICATIONS

- Transfer and Active Learning for Dissonance Detection: Addressing the Rare-Class Challenge** Association for Computational Linguistics 2023.
- Assessing Anxiety from Language: Discourse-Level Embeddings Improve Prediction.** Association for Computational Linguistics 2023.
- Detecting Dissonant Stance in Social Media** The Role of Topic Exposure. NLP+CSS at EMNLP 2022
- WWBP-SQT-lite: Multi-level Models and Difference Embeddings for Moments of Change Identification in Mental Health Forums.** The Workshop on Computational Linguistics and Clinical Psychology. 2022
- Discourse Relation Embeddings: Representing the Relations between Discourse Segments in Social Media.** Unimodal and Multimodal Induction of Linguistic Structures Workshop at EMNLP 2022.

## EDUCATION / COURSES

PhD in Computer Science + STRIDE (Science Training and Research to Inform Decisions)

Stony Brook University: GPA 3.94/4.0

January 2020 – current

Bachelor of Engineering in Computer Science + Int. MSc Physics (Hons.)

BITS Pilani: GPA 8.58/10

Aug 2013 – Aug 2018

## HONORS & AWARDS

- Outstanding Paper Award at ACL 2023** For our paper on transfer and active learning for addressing rare class challenges, at the prestigious ACL conference.
- 2022 DARPA Riser** Selected as a Defence Advanced Research Projects Agency Forward Riser for my project on detecting cognitive dissonance from language.
- INSPIRE scholarship** awarded by Dept. of Science and Technology, India- merit-based support for five years of undergraduate education (2013-18)
- BITS IPCD Travel grant** Awarded travel to Inria, France in 2018 for undergraduate thesis.
- National Talent Search Examination** Recipient of the highly selective National Talent Search scholarship in India