Vinu Sankar Sadasiyan

Final year PhD candidate
Department of Computer Science
The University of Maryland, College Park
Research Interests — AI/ML Safety

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3 Google Scholar

EDUCATION

The University of Maryland, College Park Ph.D. & M.S. in CS advised by Prof. Soheil Feizi Aug '21 – May '25 (Expected) GPA - 4.00/4.00

Indian Institute of Technology, Gandhinagar B. Tech. in CSE [♥ Director's Silver Medalist]

Jul '16 – Jul '20 GPA - 9.21/10.00

INVITED TALKS

MLOps Podcast – Red-teaming for AI

Dec '24

UK AI Safety Institute – How to Jailbreak AI Efficiently?

Nov'24

US Securities and Exchange Commission – Can AI-Generated Content be Reliably Detected?

Amazon AWS Responsible AI – Fast Adversarial Attacks on Language Models

May '24 Apr '24

Google Research – Hardness of AI Text Detection

Nov '23

RESEARCH EXPERIENCES

Google DeepMind, Mountain View

PhD Student Researcher (full-time until Jan '25)

Sep '24 – May '25 Manager: Dr. Lun Wang

Fundamental AI Research, Meta, Paris

May - Auq'24

Research Scientist Intern

Managers: Dr. Matthijs Douze, Dr. Jakob Verbeek

University of Maryland

Aug '21 – Present Advisor: Prof. Soheil Feizi

Research Assistant in CS

Advisor. 1 tot. Solien Feizi

IIT Gandhinagar

 $Aug\ '20-Jul\ '21$ Advisor: Prof. Anirban Dasgupta

 ${\it Junior~Research~Fellow~in~CSE}$

May - Jul'19

California Institute of Technology

Advisor: Dr. Ashish Mahabal

Undergraduate Research Fellow in Astronomy Department

Jan - Apr'19

Microsoft Research India Research Intern in Machine Learning and Optimization Group

Managers: Dr. Harsha Simhadri & Dr. Prateek Jain

Indian Institute of Science

May – Jul '17, Dec '17, Feb '18, May – Jul '18

Research Intern at Spectrum Lab for Signal Processing

Advisor: Prof. Chandra Seelamantula

RESEARCH PAPERS

* equal contribution

IConMark: Robust Interpretable Concept-Based Watermark For AI Images

VS Sadasivan, M Saberi, S Feizi

Accepted in Workshop on GenAI Watermarking 2025 at International Conference on Learning Representations (ICLR).

LLM-Check: Investigating Detection of Hallucinations in Large Language Models

G Sriramanan, S Bharti, **VS Sadasivan**, S Saha, P Kattakinda, S Feizi

Accepted at Conference on Neural Information Processing Systems (NeurIPS) 2024. [PDF]

DREW: Towards Robust Data Provenance by Leveraging Error-Controlled Watermarking

M Saberi, VS Sadasivan, A Zarei, H Mahdavifar, S Feizi

Preprint on arXiv. June, 2024. [PDF]

Fast Adversarial Attacks on Language Models In One GPU Minute

VS Sadasivan, S Saha*, G Sriramanan*, P Kattakinda, A Chegini, S Feizi

Accepted at International Conference on Machine Learning (ICML) 2024. [PDF]

Media Coverage 💷 The Register

Can AI-Generated Text be Reliably Detected?

VS Sadasivan, A Kumar, S Balasubramanian, W Wang, S Feizi

Accepted at Transactions on Machine Learning Research (TMLR) 2025. [PDF]

Media Coverage I Nature, Washington Post, Wired, New Scientist, The Register, TechSpot

Robustness of AI-Image Detectors: Fundamental Limits and Practical Attacks

M Saberi, VS Sadasivan, K Rezaei, A Kumar, A Chegini, W Wang, S Feizi

Accepted at International Conference on Learning Representations (ICLR) 2024. [PDF]

Media Coverage Wired, The Verge, MIT Technology Review, Bloomberg, The Register

Exploring Geometry of Blind Spots in Vision Models

S Balasubramanian*, G Sriramanan*, VS Sadasivan, S Feizi

Accepted [spotlight ☆] at Conference on Neural Information Processing Systems (NeurIPS) 2023. [PDF]

Provable Robustness for Streaming Models with a Sliding Window

A Kumar, VS Sadasivan, S Feizi

Preprint on arXiv. March, 2023. [PDF]

CUDA: Convolution-based Unlearnable Datasets

VS Sadasivan, M Soltanolkotabi, S Feizi

Accepted at Computer Vision and Pattern Recognition Conference (CVPR) 2023. [PDF]

Statistical Measures For Defining Curriculum Scoring Function

VS Sadasivan, A Dasgupta

Accepted [spotlight ☆] at SubSetML Workshop at International Conference on Machine Learning (ICML) 2021. [PDF]

Shallow RNN: Accurate Time-series Classification On Resource Constrained Device

D Dennis, DAE Acar, V Mandikal, VS Sadasivan, V Saligrama, HV Simhadri, P Jain

Accepted at Conference on Neural Information Processing Systems (NeurIPS) 2019. [PDF]

High Accuracy Patch-Level Classification Of Wireless Capsule Endoscopy

Images Using A Convolutional Neural Network

VS Sadasivan, CS Seelamantula

Accepted at IEEE International Symposium on Biomedical Imaging (ISBI) 2019. [PDF]

AWARDS AND HONORS

Kulkarni Fellowship Awardee at University of Maryland in 2023.

Notable reviewer $^{\square}$ top $\sim 1\%$ reviewer in ICLR 2023.

Director's Silver Medalist CSE, IIT Gandhinagar in 2020.

Special mention for poster Undergraduate Research Conclave, IIT Gandhinagar in 2019.

Summer Undergraduate Research Fellowship Caltech in 2019 (awarded ~ 6,350 USD).

Kerala State Topper, Regional Mathematics Olympiad in 2014.

KVPY awardee by Government of India in 2016. Ranked 85 out of $\sim 100,000$ in the country.

NTSE scholar awarded by Government of India in 2012.

SERVICES & TEACHING

Reviewer for prominent machine learning conferences such as ICML 2021, NeurIPS 2022, ICLR 2023 (Notable reviewer), NeurIPS 2023, ICML Neural Compression Workshop 2023, ICML 2024, TACL, ICML 2025, ICCV 2025.

Teaching assistant for CMSC720: Foundations of Deep Learning (Spring 2024), CMSC 422: Introduction to Machine Learning (Fall 2021), and CMSC 320: Introduction to Data Science (Spring 2022) at UMD.

Peer-assisted learning mentor at IIT Gandhinagar, helping freshmen who found it difficult to cope with their academic workload.