Vinu Sankar Sadasiyan

II-year PhD Student
Department of Computer Science
The University of Maryland, College Park
Research Interests — Security & Privacy in Deep Learning

Vinusankars.github.ioVinu@umd.eduGoogle Scholar

EDUCATION

The University of Maryland, College Park

Ph.D. $\ensuremath{\mathcal{E}}$ M.S. in CS advised by Prof. Soheil Feizi

 $\begin{array}{c} Aug~'21-Present\\ \text{GPA - }4.00/4.00 \end{array}$

Indian Institute of Technology, Gandhinagar

B. Tech. in CSE [Director's Silver Medalist]

Jul '16 – Jul '20 GPA - 9.21/10.00

RESEARCH PAPERS

Can AI-Generated Text be Reliably Detected?

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

Preprint on arXiv. March, 2023. [PDF]

Media coverage: Washington Post, New Scientist, The Register, TechSpot

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

In Advances in 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

In IEEE 16th International Symposium on Biomedical Imaging (IEEE ISBI), 2019. [PDF]

RESEARCH EXPERIENCES

IIT Gandhinagar, India

Aug '20 – Jul '21 Advisor: Prof. Anirban Dasgupta

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

May - Jul'19

Undergraduate Research Fellow in Astronomy Department

California Institute of Technology, Pasadena

Advisor: Dr. Ashish Mahabal

Microsoft Research India, Bangalore

Jan - Apr'19

Research Intern in Machine Learning and Optimization Group

Advisors: Dr. Harsha Simhadri & Dr. Prateek Jain

AWARDS AND HONORS

- Kulkarni Summer Research Fellowship at University of Maryland in 2023.
- Notable reviewer 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 Fellow Caltech in 2019 (~ 6350 USD).
- Kerala State Topper, Regional Mathematics Olympiad in 2014.
- KVPY awardee by Government of India in 2016. Ranked 85 out of $\sim 100,000$.
- NTSE scholar awarded by Government of India in 2012.

SERVICES & TEACHING

- I have served as a *reviewer* for prominent machine learning conferences such as ICML 2021, NeurIPS 2022, ICLR 2023 (Notable reviewer), NeurIPS 2023, ICML Neural Compression Workshop 2023.
- I have assisted in teaching (TA) CMSC 422: Introduction to Machine Learning (Fall 2021) and CMSC 320: Introduction to Data Science (Spring 2022) at UMD.
- I have been a *Peer-Assisted Learning mentor* at IIT Gandhinagar, helping freshmen who found it difficult to cope with their academic work load.

RESEARCH REPORTS

OSSuM: A Gradient-Free Approach For Pruning Neural Networks At Initialization VS Sadasivan, J Malaviya, and A Dasgupta [PDF]

Improved Generalized Adaptive Exponential Functional Link Network Approximates VS Sadasivan, SS Bhattacherjee, V Patel, and NV George [PDF]

 $\label{eq:FPGA-Based Area, Power, and Latency Optimized Approximate Multipliers For Neural Networks \\ \textbf{VS Sadasivan}, CK Jha, and J Mekie [PDF]$