Anurag Singh

http://anurag14.github.io

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EDUCATION

CISPA Helmholtz Center for Information Security

Saarbrücken, Germany April 2023-Present

• PhD in Computer Science

Advisor: Prof Krikamol Muandet

Munich, Germany

Technical University of Munich

• MS in Computer Science Advisor: Prof Debarghya Ghoshdastidar & Prof Matthias Nießner Nov 2020- Feb 2023 Grade: Distinction (1.5/5)

Netaji Subhas Institute of Technology, University of Delhi

Aug 14 - May 18 New Delhi

• BEng. in Information Technology Advisor: Prof AV Subramanyam

Grade: Distinction (8.7/10)

PUBLICATIONS

Robust Feature Inference: A Test-time Defense using Spectral Projections.
 Anurag Singh*, Mahalakshmi Sabanayagam*, Krikamol Muandet, Debarghya Ghoshdastidar TMLR 2024

Domain Generalization via Imprecise Learning [pdf]
 Anurag Singh, Siu Lun Chau, Shahine Bouabid, Krikamol Muandet ICML 2024 (Spotlight)

Improving Semi-Supervised Domain Adaptation Using Effective Target Selection and Semantics [pdf]
 CVPR L2ID Workshop 2021

Anurag Singh*, Naren Doraiswamy*, Sawa Takamuku, Megh Bhalerao, Titir Dutta, Soma Biswas

Adaptive Margin Diversity Regularizer for handling Data Imbalance in Zero-Shot SBIR. [pdf]
 Titir Dutta, Anurag Singh, Soma Biswas
 ECCV 2020 (Spotlight)

• StyleGuide: Zero-Shot Sketch-based Image Retrieval Using Style-Guided Image Generation. [pdf] Titir Dutta, Anurag Singh, Soma Biswas IEEE Transactions on Multimedia (TMM), 2020

• Image Corpus Representative Summarization. [pdf]
Anurag Singh, Lakshay Virmani, AV Subramanyam
IEEE BigMM 2019, NUS Singapore (Honourable Mention Award)

Work Experience

Indian Institute of Science

Bangalore, India

Research Associate Advisor: Prof. Soma Biswas

July 2019 - Sept 2020

• Research on learning with limited labels and imbalanced data in different computer vision tasks like classification, domain-adaptation (DA) and Sketch-based Image Retrieval (SBIR).

Royal Bank of Scotland (RBS)

New Delhi, India

Sowtware Engineer

June 2018 - July 2019

- Led access management face recognition system initiative at RBS. Conceptualized the architecture to perform recognition with low latency on edge. [MVP]
- \circ As a software engineering Intern in summer 2017, built a utility to replay lost brokerage messages saving ~ 500 man-hours annually. Considering performance, offered a full-time position.

New Delhi, India

Research Associate Advisor: Prof. AV Subramanyam

Aug 17 - Mar 18

• Formulated first end-to-end deep learning model and evaluation metric for unsupervised image collection summarization. First author publication in BigMM'19 at NUS Singapore. [poster] [ppt]

Honours and Awards

- Merit Scholarship: Half tuition waiver (28,000 \$) at UChicago for MSCS in Fall 2020.
- Honorable Mention Award at IEEE BigMM 2019 amongst top 3 of 250 submissions.
- Merit Scholarship: Full tuition waiver at Netaji Subhas Institute of Technology (2014-2018).

Professional Service

• Reviewer: NeurIPS 2024, IEEE TIP 2023, WACV 2021, WACV 2022, ICVGIP 2023

Teaching

- TA: Elements of Machine Learning, Winter semester 2023, Saarland University
- TA: Introduction to Deep Learning, Winter semester 2021, TU Munich