Vedant Nanda

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Education

University of Maryland & Max Planck Institute for Software Systems — *MD, USA & SB, Germany*

Ph.D. in Computer Science — *2019 - now*

- Second year student in UMD-MPI joint program.
- Research Interests: Trustworthy Machine Learning, Computers & Society
- GPA: 4.0/4.0
- TA for CMSC 320 (Intro to Data Science), Fall 2019
- Advisors: Krishna P. Gummadi (MPI-SWS) and John P. Dickerson (University of Maryland)

Indraprastha Institute of Information Technology (IIIT) Delhi — *New Delhi, India*

B.Tech. in Computer Science and Engineering — *2015 - 2019*

- **GPA: 9.47/10**, in top 5% of institute
- Part of dean's list for academic excellence for all years
- Selected Coursework: Numerical Methods, Calculus-I, Calculus-II, Machine Learning, Collaborative Filtering, Information Retrieval

Conference Publications

Fairness Through Robustness: Investigating Robustness Disparity in Deep Learning — *FAccT (formerly FAT*)*

Vedant Nanda*, Samuel Dooley*, Sahil Singla, Soheil Feizi, John P. Dickerson — *2021*

* Equal Contribution

Balancing the Tradeoff between Profit and Fairness in Rideshare Platforms during High-Demand Hours — *AAAI*

Vedant Nanda, Pan Xu, Karthik A. Sankararaman, John P. Dickerson, Aravind Srinivasan — *2020*

Also presented at AIES (Oral)

On the Long-term Impact of Algorithmic Decision Policies: Effort Unfairness and Feature Segregation through Social Learning — *ICML*

Hoda Heidari *, **Vedant Nanda** *, Krishna P. Gummadi — *2019*

* Equal Contribution

Leveraging Facebook's Free Basics Engine for Web Service Deployment in Developing Regions — *ICTD*

S.Singh*, **Vedant Nanda***, R.Sen, S.Sengupta, P.Kumaraguru, K.P.Gummadi — *2017*

* Equal Contribution

Workshops and Posters

Unifying Model Explainability and Robustness via Reasoning Labels — *Workshop on Safety and Robustness in Decision Making , NeurIPS*

Vedant Nanda, Junaid Ali, Krishna P. Gummadi, Muhammad Bilal Zafar — *2019*

Stop the KillFies! Using Deep Learning Models to Identify Dangerous Selfies — *MSM Workshop, WWW*

Vedant Nanda, H.Lamba, D.Agarwal, M.Arora, N.Sachdeva, P.Kumaraguru — *2018*

Empirical Analysis of Facebook's Free Basics — *SIGMETRICS (poster)*

S.Singh*, **Vedant Nanda***, R.Sen, S.Ahmad, S.Sengupta, A.Phokeer, Z.A.Farooq, T.A.Khan, P.Kumaraguru, I.A.Qazi, D.Choffnes, K.P.Gummadi — *2017*

* Equal Contribution

Work Experience

University of Maryland, College Park — *MD, USA*
Research Assistant — *Jan 2020 - Present*
Advisor: John P. Dickerson

University of Maryland, College Park — *MD, USA*
Teaching Assistant, CMSC320: Intro to Data Science — *Aug 2019 - Dec 2019*
Advisor: John P. Dickerson

Max Planck Institute for Software Systems — *Saarbrücken, Germany*
Research Assistant — *Aug 2019 - Present*
Advisor: Krishna P. Gummadi

Max Planck Institute for Software Systems — *Saarbrücken, Germany*
Research Intern — *May 2018 - Aug 2018*
Advisor: Krishna P. Gummadi

Precog, IIITD — *New Delhi, India*
Research Intern — *May 2017 - Aug 2017*
Advisor: Ponnurangam Kumaraguru

Honors & Awards

2019-20	Dean's Fellowship, University of Maryland.
2018	Best TA award for Data Structures and Algorithms given by the institute.
2018	Selected for SN Bose scholars program, to spend summer'18 at a US university. Awarded to top 50 undergrad and masters students across India. Rejected for internship at MPI-SWS.
2018	Selected for MPI-SWS internship program.
2016, 17, 18, 19	Dean's List for academic excellence.
2016, 17, 18, 19	Received Chairman Merit scholarship of Rs. 100,000.
2015	Secured the prestigious KVPY fellowship.
2015	Secured an All India Rank of 804 in JEE mains out of 1.5 million candidates.

Service

Reviewer	ASONAM 2019
	WWW 2020, 2021
	AAAI 2021
	CVPR 2021
	ICML 2021
	ICCV 2021

PhD Coursework

1. **PHYS 798J: Science and Tech Policy**
   Spring 2021 by Prof. Rosina Bierbaum and Prof. Sylvester Gates
2. **CMSC 828L: Existential Threats from AI**
   Spring 2021 by Prof. David Jacobs
3. **CMSC 634: Empirical Research Methods in Computer Science**
   Fall 2020 by Prof. Michelle Mazurek, Grade: A
4. **CMSC 828I: Advanced Techniques in Visual Recognition and Learning**
   Fall 2020 by Prof. Abhinav Shrivastava, Grade: A+

5. **CMSC 764: Advanced Numerical Optimization**
   Spring 2020 by Prof. Tom Goldstein, Grade: A
6. **CMSC 828M: Applied Mechanism Design for Social Good**
   Spring 2020 by Prof. John P. Dickerson, Grade: A
7. **CMSC 726: Machine Learning**
   Fall 2019 by Prof. Soheil Feizi, Grade: A
8. **CMSC 723: Computational Linguistics I**
   Fall 2019 by Prof. Hal Daumé III, Grade: A

Skills

ML	PyTorch, Python, Numpy, Pandas, Keras, Tensorflow
Other	Matplotlib, Git, Django, Java, Android Studio, C/C++, R, MATLAB, SVN

References

1. **Prof. Krishna P. Gummadi**
   Scientific Director
   Max Planck Institute for Software Systems
2. **Prof. John P. Dickerson**
   Assistant Professor, Computer Science
   University of Maryland, College Park