



INTERESTS	Genomic Data Privacy, Adversarial Machine Learning, Natural Language Processing, Complex Networks	
EDUCATION	Ph.D. in Computer Science	2017-Present
	Washington University in St. Louis Partial coursework at Vanderbilt University (2017-18) <i>Advisor: Dr. Yevgeniy Vorobeychik</i>	
	M.S. in Computer Science	Jan 2021
	Washington University in St. Louis	
	Bachelor of Technology	May 2017
	Shiv Nadar University <i>Major: Computer Science</i> <i>Minor: Mathematics</i>	
RESEARCH	Privacy in Genomic Beacon Services	(Under Review)
	Work in association with the GetPreCiSe center at Vanderbilt University. Objective: Proposed heuristics to mitigate membership-inference attacks on genomic data beacons with minimal impact to utility, and formal guarantees of privacy.	
	Genomic Re-Identification using Public Face Images	
	Work in association with the GetPreCiSe center at Vanderbilt University. Objective: Evaluated and presented methods to mitigate privacy risks associated with joint public release of face-photographs and genotypes. Probabilistic linkage using phenotype-predicting deep-neural networks; defense using adversarial examples.	
Topic Modeling (Semantic Cover)		
	Work in association with the GetPreCiSe center at Vanderbilt University. Objective: Deterministic topic modeling approach based on the greedy solution to Set-Cover, and word-embeddings for vector representations. Focus on short-texts.	
Community Detection		(Vanderbilt, 2017)
	Objective: Scalable $O(E)$ community detection heuristic for large weighted-directed networks using simulated parallel information flow.	
PUBLICATIONS	A Semantic Cover Approach to Topic Modeling <i>Rajagopal Venkatesaramani, Douglas Downey, Bradley Malin, Yevgeniy Vorobeychik</i> *SEM 2019 – The Eighth Joint Conference on Lexical and Computational Semantics	

<p>PREPRINTS</p>	<p>Reidentification of Individuals in Genomic Databases using Public Face Images <i>Rajagopal Venkatesaramani, Bradley Malin, Yevgeniy Vorobeychik</i> arXiv:2102.08557, 2021</p> <p>Community Detection by Flow Simulation <i>Rajagopal Venkatesaramani, Yevgeniy Vorobeychik</i> arXiv:1805.04920, 2018</p>
<p>TEACHING</p>	<p>Teaching Assistant (MTE) – Analysis of Network Data Fall 2019 Washington University in St. Louis</p> <p>Instructor – Introduction to Computing and Programming Monsoon 2016 Learning and Academic Support Center, Shiv Nadar University</p> <p>Instructor – Data Structures Winter 2016 Learning and Academic Support Center, Shiv Nadar University</p> <p>Teaching Assistant – Data Structures Winter 2015 Shiv Nadar University</p>
<p>PRESENTATIONS/ GUEST LECTURES</p>	<p>Realizing Re-Identification from Face Images is Harder Than You Think! CEER Annual Meeting, 2021</p> <p>Data Privacy (Focus on Genomic Privacy) AI and Society, CS411A, Washington University in St. Louis, 2020</p> <p>Networks in AI, NLP Analysis of Network Data, CS416A, Washington University in St. Louis, 2019</p>
<p>WORK EXPERIENCE</p>	<p>Summer Intern 2016 Dell International Services, Hyderabad, India SOA domain audit tool – Best Intern Award</p> <p>Summer Intern (Trainee) 2015 HCL Technologies, Noida, India Trained in C#, ASP and the .NET framework</p>
<p>SERVICE</p>	<p>Reviewer Artificial Intelligence Review (AIRE)</p> <p>Reviewer Machine Learning, Springer Nature (MACH)</p>
<p>LEADERSHIP</p>	<p>President WUSTL Ballroom, 2020-21</p> <p>President UMANG – The Indian Graduate Student Association, WUSTL, 2019-20</p> <p>Founding Chair ACM Shiv Nadar University Chapter</p>