

Hamed Nilforoshan-Dardashti

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EDUCATION

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| Stanford University | Palo Alto, CA |
| Ph.D. Computer Science Advisor: Professor Jure Leskovec | 2020 – 2025 (Expected) |
| Columbia University | New York, NY |
| B.A. Computer Science GPA: 4.106, <i>Summa Cum Laude</i> (Top 5%) | 2015 – 2019 |

HONORS

Best Paper Award (Outstanding Paper), ICML 2022
Stanford Knight-Hennessy Scholarship - \$365,000 - Three years of grad. tuition, room, and board (< 2% acceptance rate)
Stanford Human-Centered AI Grant - \$100,000 - Grant supporting compute resources for AI for healthcare research
NSF Graduate Research Fellowship - \$138,000 - Three years of financial support for graduate research
Phi Beta Kappa, Columbia University - Awarded to top 10% of Columbia College graduates
Snapchat Research Scholarship - \$10,000 - Awarded to 8 students annually for outstanding coursework and research depth
Columbia John Jay Scholarship - Awarded to top 1% of Columbia College applicants
Columbia Computer Science Russell Mills Award - \$256 - Awarded to 4 students annually for academic excellence in CS
Columbia Venture Competition Finalist - Top 5 startups founded by Columbia students, out of over 100 companies
Columbia Fastpitch Winner - \$1,500 - Awarded 2nd place from over 60 companies pitched
Columbia NRHH (National Residence Hall Honorary) - Best Residential Community, for founding Comedy House
National Merit Scholar - \$2,500

EXPERIENCE

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| Graduate Research Assistant, Stanford University | 2020 – Present |
| Investigating data science and machine learning methods for inequality and health [1, 2, 3, 4, 5]. | |
| Machine Learning Data Scientist, Airbnb Inc. | 2019 – 2020 |
| Developed and launched algorithms to mitigate theft, fraud, and money-laundering on the Airbnb marketplace. | |
| Research Intern, Snapchat Research | 2018 – 2019 |
| Designed a novel graph model and algorithm to identify fraud rings (e.g. scams, fake news, botnets) on Snapchat [5]. | |
| Research Assistant, Stanford University | 2017 – 2019 |
| Studied how environmental factors affect food consumption, and proposed interventions to reduce diet health inequalities [4]. | |
| Data Science Intern, Airbnb Inc. | 2018 |
| Studied racial discrimination against African-American guests on Airbnb, and prototyped methods to reduce it. | |
| Research Assistant, Columbia University | 2015 – 2018 |
| Designed and evaluated novel AI methods to generate automated writing feedback [6, 7]. | |
| Co-Founder and Project Lead, Bites App, Inc. | 2015 – 2016 |
| Developed a food marketplace app for iOS and Android, providing fresh, affordable, home-cooked meals to college students. | |

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| Education Coordinator, Massachusetts Institute of Technology | 2015 – 2015 |
| Taught entrepreneurship to students at MIT Launch, a summer program and startup incubator for high-school students. | |
| Citizen Teacher, Citizen Schools | 2013 – 2014 |
| Taught programming and video game design to Boston public schools students at the Orchard Gardens Middle School. | |
| Founder and Lead Engineer, AlNoor Games | 2012 – 2015 |
| Built and published multiple web games with over 100,000,000 cumulative plays, while still in high-school. | |

INVITED TALKS/PANELS

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| Cornell University | 2022 |
| University College of London | 2022 |
| Technische Universität Darmstadt | 2022 |
| Encode Justice | 2022 |
| Airbnb, Inc. | 2018 |
| University of California, Irvine | 2018 |
| Buzzfeed, Inc. | 2018 |

REVIEWING AND SERVICE

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| Reviewer, TMLR | 2022 |
| Reviewer, NeurIPS Workshop on Neuro Causal and Symbolic AI | 2022 |
| Reviewer, FaccT | 2022 |
| Reviewer, ICML | 2022 |
| Reviewer, The Web Conference WWW | 2021 |

PUBLICATIONS

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- [1] **Hamed Nilforoshan***, Johann Gaebler*, Ravi Shroff, Sharad Goel. “Causal Conceptions of Fairness and their Consequences.” ICML 2022 **Outstanding Paper Award** and Long talk [**< 0.2% acceptance rate**]. ACIC 2022 Oral. <http://hamedn.com/docs/causal-fairness22.pdf>
- [2] **Hamed Nilforoshan***, Wenli Looi*, Emma Pierson*, Blanca Villanueva, Nic Fishman, Yiling Chen, John Solar, Beth Redbird, David Grusky, Jure Leskovec. “Human Interaction Networks Reveal that Large Cities Facilitate Segregation.” Under review. <http://hamedn.com/docs/segregation22.pdf>
- [3] Sajjad Fouladvand*, Frederico Gomes*, **Hamed Nilforoshan**, Jiaxuan You, Morteza Noshad, Rok Sasic, Jure Leskovec, Jonathan Chen. Graph-Based Clinical Recommender: Predicting Specialists Procedure Orders using Graph Representation Learning. Under Review. <http://hamedn.com/docs/clinical-recsys22.pdf>
- [4] Rishi Bonmassami,..., **Hamed Nilforoshan**,..., Percy Liang (116 authors). “On the Opportunities and Risks of Foundation Models.” Arxiv 2021. <https://arxiv.org/abs/2108.07258>
- [5] Tim Althoff, **Hamed Nilforoshan**, Jenna Hua, Jure Leskovec. “Large-Scale Diet Tracking Data Reveal Disparate Impacts of Food Environment.” Nature Communications 2021. **⋈ 10% acceptance rate** <http://hamedn.com/docs/diet21.pdf>

[6] **Hamed Nilforoshan**, Neil Shah. “SliceNDice: Mining Suspicious Multi-attribute Entity Groups with Multi-view Graphs.” in IEEE DSAA 2019. Washington, D.C. [29% acceptance rate] <http://hamedn.com/dsaa-19.pdf> + 2 patents pending

[7] **Hamed Nilforoshan**, Eugene Wu. “Leveraging Quality Prediction Models for Automatic Writing Feedback.” in AAAI ICWSM 2018. Stanford, CA. [16% acceptance rate] <http://hamedn.com/dialectic-icws18.pdf>

[9] **Hamed Nilforoshan**, James Sands, Kevin Lin, Rahul Khanna, Eugene Wu. “Segment-Predict-Explain for Automatic Writing Feedback.” in Collective Intelligence 2017. New York, NY. <http://hamedn.com/docs/dialectic-ci17.pdf>

(* indicates co-first authorship)