Hamed Nilforoshan-Dardashti

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EDUCATION

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, *Summa Cum Laude* (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

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.

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

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

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

[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 Sosic, 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-icwsm18.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)