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

Stanford Knight-Hennessy Scholarship - $365,000 - Three years of graduate tuition, room, and board (< 2% acceptance rate)
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].

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.

PUBLICATIONS

[1] **Hamed Nilforoshan***, Johann Gaebler*, Ravi Shroff, Sharad Goel. "Causal Conceptions of Fairness and their Consequences." ICML 2022 **Long talk [~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. "Interaction Networks Reveal that Large, Dense Cities Facilitate Segregation." In preparation for submission to Nature. http://hamedn.com/docs/segregation22.pdf

[3] Rishi Bonmassami,..., **Hamed Nilforoshan**,..., Percy Liang (116 authors). "On the Opportunities and Risks of Foundation Models." Arxiv 2021. https://arxiv.org/abs/2108.07258

[4] 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

[5] **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**

[6] **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

[7] **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)