

Alireza Hashemi

Academic & Professional CV

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Education

- **The City University of New York**, Ph.D., Physics (Aug 2022 - Present)
- **Sharif University of Technology**, M.Sc., Physics (Sep 2019 - Jan 2022)
- **University of Zanjan**, B.Sc., Physics (Sep 2015 - June 2019)

Work Experience

- **Senior Data Scientist**, blubank (May 2020 - Aug 2022)
Fraud detection, customer behaviour analysis, transaction network analysis
- **Machine Learning Course Mentor**, Rahnema College (2021)
- **Machine Learning Intern**, Rahnema College (2019)

Publications

- Social distancing in pedestrian dynamics
Physical Review E - **A. Hashemi**, S. Sajjadi (equal contrib.), F. Ghanbarnejad - 2021
- Chaotic dynamics of active topological defects
Soft Materials - **A. Hashemi**, M. R. Ejtehadi - 2021
- Analysis of the ground-state energy eigenvalues of fractal quantum potentials
Physica Scripta - **A. Hashemi**, A. H. Darooneh - 2019
- Many-body effects on the radiative heat transfer in fractal nanostructures
IJAA - M. Nikbakht, S. Ahmadian, **A. Hashemi** - 2017

Conferences

- DBS 2020 - Social distancing in pedestrian dynamics (Talk)
- NetSci 2020 - COVID-19 in Iran (Poster)
- CCS 2020 - Effectiveness of social distancing through the lens of ABM (Talk)

Skills & Experience

- C++, Python, R, Matlab • Social media data mining, NetworkX, graph-tool, gephi
- Machine Learning & deep learning with Python libraries, Numerical simulations
- Advanced SQL/NoSQL/Graph databases • Data visualization, \LaTeX

Other

- TA for Physics 1, Analytical Mechanics 1&2 (Sep 2017), Electromagnetism (Sep 2018), Nonlinear Dynamics & Chaos (Sep 2020)
- Translation of the book "Dark Matter & Dark Energy" by Brian Clegg to Farsi
- NTD Hackathon runner up team (Covered in NPR.org [here](#))
- 23rd & 24th School on Physics, IASBS
- Tehran School on Complex Networks (TACN2018), Shahid Beheshti University

References

Prof. Amir Hossein Darooneh, Dept. of Applied Math., University of Waterloo
Prof. Fakhteh Ghanbarnejad, Dept. of Physics, Sharif University of Technology
Prof. Moladad Nikbakht, Dept. of Physics, University of Zanjan

Links

Google Scholar, **R**esearchgate, **in** LinkedIn, **🏠** Homepage