Mailing Address:

Aurora Innovation, Inc. 1880 Embarcadero Palo Alto, CA 94303 USA

Citizenship:

Iranian (U.S. Permanent Resident)



AREAS OF INTEREST

Data Science & Machine Learning Maps & Geospatial Data Science Natural Language Processing **Graph & Sequence Mining** Ads & Recommender Systems

SKILLS

Python, Java, C++

PyTorch, Tensorflow, NLTK, NetworkX, SNAP

Hive, Spark

SQLite, PostgreSQL, MySQL

MATLAB, OpenMPI, R

Django, DASH, Bokeh, D3

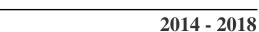
Payam Siyari

Sr. Data Scientist - Aurora Innovation, Inc.

payamsiyari@gmail.com www.payamsiyari.com

linkedin.com/in/payamsiyari github.com/payamsiyari

EDUCATION



goo.gl/4dwxgx Google Scholar



PhD, Computer Science (Minor in Statistics)

College of Computing, Georgia Institute of Technology Atlanta, GA, USA Thesis: Optimization-Driven Emergence of Deep Hierarchies w. Applications in Data mining & Evolution

MSc, Computer Science - Machine Learning (GPA: 4.0/4.0) 2014 - 2016 College of Computing, Georgia Institute of Technology Atlanta, GA, USA Coursework: Machine Learning, Deep Learning for Perception, Natural Language Processing,



2011 - 2013 MSc, Computer Engineering - Software Eng. (GPA: 19.24/20.00) Dpt. of Computer Engineering, Sharif University of Technology Tehran, Iran

Thesis: Network Topology Inference from Incomplete Data

Coursework: Statistical Pattern Recognition, Data Mining, Convex Optimization, Game Theory.

Data and Visual Analytics, High Performance Computing, Time Series Analysis, Regression.



BSc, Computer Science (GPA: 18.46/20.00)

2007 - 2011

Dpt. of Mathematical Sciences, Shahid Beheshti University

Tehran, Iran

PROFESSIONAL EXPERIENCE



Senior Data Scientist

Aurora (San Francisco, CA), 2021 - Present

- (Aurora Innovation, Inc. acquired Uber ATG)

Uber

Senior Data Scientist Data Scientist II

Uber (San Francisco, CA), 2020 - 2021

2018 - 2019

- Advanced Technologies Group (ATG) Full-Stack Data Scientist
 - <u>Data Structures and Algorithms</u>: GeoSpatial joins and indexing on Uber UMM.
 - <u>Data Engineering</u>: Advanced SQL, Data pipeline development (Hive, Spark).

 - Statistical Analysis: Strategic decision making e.g. minimum miles for deploying servic
 - <u>Deep Learning</u>: GeoSpatial representation learning on satellite & road networks. <u>Data Visualization, Analytics and Dashboarding: DASH, Bokeh.</u>
 - @UberEnginnering Showcase:
 - Power On: Accelerating Uber's Self-Driving Vehicle Development with Data
 - Searchable Ground Truth: Querying Uncommon Scenarios in Self-Driving Development

Uper Software Engineering Intern

Uber ATG (Pittsburgh, PA), Fall 2017

- Self-Driving Technology Engineer (Road Analytics).



Research Assistant

Georgia Tech (Atlanta, GA), 2014 - 2018

- Research on Analysis and Modeling of Hierarchical Structures within Big Data.
- Applications in Sequential Pattern Mining, Feature Extraction, Compression & Evolution
- xerox

Research Intern

Xerox XRCE (Grenoble, France), Fall 2015

- Research on MDL-Based Grammatical Inference from Sequential Data. - Applications in Compression & Unsupervised Parsing of Natural Language.
- Sharif University (Tehran, Iran), 2011-2013 **Research Assistant**
- Research on Network Inference via NMF and Compressed Sensing. - Research on Epidemic Models over Multilayer Networks.



iOS Developer

Pichak co. (Tehran, Iran), 2011

- VPN in Touch: A VPN account management app (client side).

SELECTED PUBLICATIONS

- P. Siyari, B. Dilkina, C. Dovrolis, "Evolution of Hierarchical Structure and Reuse in iGEM Synthetic DNA Sequences", International Conference on Computational Science (ICCS), 2019.
- P. Siyari, B. Dilkina, C. Dovrolis, "Emergence and Evolution of Hierarchical Structure in Complex Systems", Springer Proc. in Complexity: Dynamics On and Of Complex Networks III, 2018.
- P. Siyari, M. Galle, "The Generalized Smallest Grammar Problem", In Proc. of International Conference on Grammatical Inference (ICGI), 2017.
- P. Siyari, B. Dilkina, C. Dovrolis, "Lexis: An Optimization Framework for Discovering the Hierarchical Structure of Sequential Data", In Proc. of ACM SIGKDD, 2016.
- M. Salehi, R. Sharma, M. Marzolla, M. Magnani, P. Siyari, D. Montesi, "Spreading Processes in Multilayer Networks", In IEEE Trans. Network Science and Engineering, 2015.

