Work Email:

payamsiyari@google.com

Work Mailing Address:

Google Headquarters 1600 Amphitheatre Parkway Mountain View, CA 94043 **USA**



AREAS OF INTEREST

Graphs & Networks Mining Natural Language Processing Maps & Geo-spatial Data Science Ads & Recommender Systems

SKILLS

Python, Java, C++

PyTorch, Tensorflow, NLTK, NetworkX, SNAP

Hive, Spark

SQLite, PostgreSQL, MySQL

MATLAB, OpenMPI, R

Django, DASH, Bokeh, D3

SELECTED PAPERS

- P. Siyari, et al., "Evolution of Hierarchical Structure and Reuse in iGEM Synthetic DNA Sequences", International Conference on Computational Science (ICCS), 2019.
- P. Siyari, et al., "Emergence and Evolution of Hierarchical Structure in Complex Systems", Springer Proc. in Complexity: Dynamics On and Of Complex Networks III, 2018.
- P. Siyari, et al., "The Generalized Smallest Grammar Problem", International Conference on Grammatical Inference (ICGI), 2017.
- P. Siyari, et al., "Lexis: An Optimization Framework for Discovering Hierarchical Structure of Sequential Data", In Proc. of ACM SIGKDD, 2016.

Payam Siyari

Software Engineer, Google LLC

payamsiyari@gmail.com M

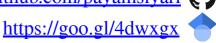


https://www.payamsiyari.com



https://linkedin.com/in/payamsiyari

https://github.com/payamsiyari



EDUCATION



PhD, Computer Science (Minor in Statistics)

College of Computing, Georgia Institute of Technology

Thesis: Optimization-Driven Emergence of Deep Hierarchies with Applications in Data Mining & Evolution

MSc, Computer Science - Machine Learning (GPA: 4.0/4.0) Aug 2014 - Aug 2016 College of Computing, Georgia Institute of Technology Atlanta, GA, USA



MSc, Computer Engineering - Software Eng. (GPA: 19.24/20.00) Aug 2011 - Aug 2013 Dpt. of Computer Engineering, Sharif University of Technology Tehran, Iran Thesis: Network Topology Inference from Incomplete Data



BSc, Computer Science (GPA: 18.46/20.00)

Dpt. of Mathematical Sciences, Shahid Beheshti University

Sep 2007 - Aug 2011

Aug 2014 - Dec 2018

Atlanta, GA, USA

Tehran, Iran

PROFESSIONAL EXPERIENCE



Software Engineer

Google (Mountain View, CA), Mar 2022 - Present

Senior Data Scientist

Aurora (San Francisco, CA), Jan 2021 - Mar 2022

- (Aurora Innovation, Inc. acquired Uber ATG.)
- Analytics of autonomous trucking operations & triage:
- Data-driven study pipeline for construction scenario mining.
- **Autonomous trucking product strategy modeling & optimization:**
- Geo-spatial analysis for economics of resource placement and assignment. Weather data warehouse design and management for engineering & business planning.

Uber Senior Data Scientist **Data Scientist II**

Uber (San Francisco, CA), Jan 2020 - Jan 2021

Oct 2018 - Dec 2019

- **Advanced Technologies Group (ATG).**
- Worked on data-driven outlook for expansion of self-driving rideshare service:
- Statistical analysis for strategic decisions, e.g. min. test miles before deployment.
- Deep learning for geo-spatial representations of satellite images & road networks.
- Developed tooling for analysis of occurrence of offline tests in on-road driving logs:
- Algorithm development for geo-spatial modeling & indexing using Uber UMM & H3.
- Data engineering for large-scale pipeline development (Hive, Spark).
- **@UberEnginnering Showcase:**
- Power On: Accelerating Uber's Self-Driving Vehicle Development with Data
- Searchable Ground Truth: Querying Uncommon Scenarios in Self-Driving Development

Software Engineering Intern Uber (Pittsburgh, PA), Aug 2017 - Dec 2017

- Self-Driving Technology Engineer (Road Analytics).
- Scalable automated scenario identification in autonomous driving logs.



Research Assistant

Georgia Tech (Atlanta, GA), Aug 2014 - Dec 2018

Research on analysis and modeling of optimization-driven hierarchical structures.

Applications in sequential pattern mining, feature extraction, compression & evolution.

xerox Research Intern

Xerox XRCE (Grenoble, France), Aug 2015 - Dec 2015

- Research on MDL-Based grammatical inference from sequential data.
- Applications in compression & unsupervised parsing of natural language.



Research Assistant Sharif University (Tehran, Iran), Aug 2011 - Aug 2013

- Research on network inference via matrix factorization & compressed sensing.
- Research on epidemic models over multilayer networks.



iOS Developer

Pichak co. (Tehran, Iran), Apr 2011 - Aug 2011

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

Last Updated: March 2022