

Payam Siyari

Data Scientist II, Uber Advanced Technologies Group

Mailing Address:

Uber Advanced Technologies Group

579 20th Street

San Francisco, CA 94107

USA

payamsiyari@gmail.com 

www.payamsiyari.com 

[linkedin.com/in/payamsiyari](https://www.linkedin.com/in/payamsiyari) 

github.com/payamsiyari 

[goo.gl/4dwxgx](https://scholar.google.com/citations?user=goo.gl/4dwxgx) Google Scholar

AREAS OF INTEREST

Data Science & Machine Learning

Natural Language Processing

Graph & Sequence Mining

Recommender Systems

SOFTWARE PROJECTS

Lexis

- Sequential pattern mining
- Network analysis
- Feature extraction

GSGP

- Unsupervised parsing in NLP
- Compression

Evo-Lexis

- Complex Network Analysis

Sign Language Recognition

- Deep Learning (3D CNN)
- Spatio-Temporal Feature Learning

MLNetwork

- Mining of multilayer networks

SLPMF

- Recommender Systems (NMF)
- Link Prediction in Networks

VPN in Touch

- VPN Management Client (iOS)

SKILLS & EXPERIENCES

Python, Java, C++, Swift

MATLAB, OpenMPI, R

Theano, PyTorch, Caffe, Tensorflow

Keras, Scikit-Learn, Pandas, NLTK

Hadoop, Pig, Spark

SQLite, PostgreSQL, MySQL

HTML, Django, D3

PhD, Computer Science (Minor in Statistics) 2014 - 2018

College of Computing, Georgia Institute of Technology Atlanta, GA, USA

Thesis: [Optimization-driven emergence of deep hierarchies with applications in data mining and 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, Data and Visual Analytics, High Performance Computing, Time Series Analysis, Regression

MSc, Computer Engineering - Software Eng. (GPA: 19.24/20.0) 2011 - 2013

Department of Computer Eng., Sharif University of Technology Tehran, Iran

Thesis: [Network Topology Inference from Incomplete Data](#)

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

BSc, Computer Science (GPA: 18.46/20.0) 2007 - 2011

Department of Math Sciences., Shahid Beheshti University Tehran, Iran

PROFESSIONAL EXPERIENCE

Data Scientist II Uber ATG (San Francisco, CA), 2018 - Present

- Data Science Team - @UberEngineering Showcase:
- [Power On: Accelerating Uber's Self-Driving Vehicle Development with Data](#)

Software Engineering Intern Uber ATG (Pittsburgh, PA), Fall 2017

- Self-Driving Technology Engineer (Road Analytics)

Research Assistant GeorgiaTech (Atlanta, GA), 2014 - 2018

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

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

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

- 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 Proceedings in Complexity: **Dynamics On and Of Complex Networks III** - Machine Learning and Statistical Physics Approaches, 2018.
- **P. Siyari**, B. Dilkina, C. Dovrolis, "Lexis: An Optimization Framework for Discovering the Hierarchical Structure of Sequential Data", In Proceedings of **ACM SIGKDD 2016** (Oral Presentation - Acceptance Rate: 8.9%).
- **P. Siyari**, M. Galle', "The Generalized Smallest Grammar Problem", In Proceedings of International Conference on Grammatical Inference (**ICGI**), 2016.
- M. Salehi, **P. Siyari**, M. Magnani, D. Montesi, "Multidimensional Epidemic Thresholds in Diffusion Processes over Interdependent Networks", In **Chaos, Solitons & Fractals**, 2015.
- M. Salehi, R. Sharma, M. Marzolla, M. Magnani, **P. Siyari**, D. Montesi, "Spreading Processes in Multilayer Networks", In **IEEE Transactions on Network Science and Engineering**, 2015.
- A. Fattaholmanan, H. R. Rabiee, **P. Siyari**, A. Khodadadi, and A. Soltani-Farani, "A Peer to Peer Compressive Sensing Framework for Network Monitoring", In **IEEE Communications Letters**, 2015.
- **P. Siyari**, H. R. Rabiee, M. Salehi, and M. Eslami, "Network Reconstruction under Compressive Sensing", In Proc. **ASE/IEEE International Conference on Social Informatics**, Dec. 2012.