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RESEARCH
INTERESTS

⋄ Probabilistic Machine Learning: Bayesian Nonparametric Models, Probabilistic Graphical Models, Variational Bayesian Inference, Monte Carlo Techniques

⋄ Stochastic Processes: Multivariate Point Processes , Survival Analysis

⋄ Dependent Data Modeling: Modeling Spatio-Temporal Data, Time-Sensitive Recommender Systems, User Behavior Modeling

⋄ High Dimensional Data Analysis: Sparse Data Modeling, Structured Dictionary Learning, Supervised Dictionary Learning

EDUCATION

Sharif University of Technology, Tehran, IRAN. September 2014 - Now
Ph.D. in Computer Engineering-Artificial Intelligence, **Current GPA: 19.78/20**
Research Proposal: *Continuous-Time Modeling of Marked Events*

Sharif University of Technology, Tehran, IRAN. September 2012 - June 2014
M.Sc. in Computer Engineering-Artificial Intelligence, **GPA: 19.55/20**
Thesis: *Online Stream Classification Using Bayesian Non-parametric Models*, **20/20**

Sharif University of Technology, Tehran, IRAN. September 2008 - June 2012
B.S. in Computer Engineering, **GPA: 19.81/20**
Thesis: *A Review On Bayesian Inference and Experimental Design Applications in Compressed Sensing*, **20/20**

PUBLICATION

⋄ **Recurrent Poisson Factorization for Temporal Recommendation**,
(A. Hosseini,K. Alizadeh, A. Khodadadi, A. Arabzadeh, M. Farajtabar, H. Zha, H. R. Rabiee), *International Conference on Knowledge Discovery and Data Mining (**KDD**), Halifax, Nova Scotia, Canada, 2017.*

⋄ **Continuous-Time User Modeling in the Presence of Badges: A Probabilistic Approach**,
(A. Khodadadi, A. Hosseini, E. Tavakoli, H. R. Rabiee), Submitted to *ACM Transactions on Knowledge Discovery from Data, 2017.*

⋄ **HNP3: A Hierarchical Nonparametric Point Process for Modeling Content Diffusion Over Social Media**,
(A. Hosseini, A. Khodadadi, H. R. Rabiee, A. Arabzadeh), *IEEE International Conference on Data Mining* **ICDM**, *Barcelona, Spain, 2016.*

⋄ **Classifying A Stream Of Infinite Concepts: A Bayesian Nonparametric Approach**,
(A. Hosseini, H. R. Rabiee, H. Hafez A. Soltani,), *7th European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases* **ECML-PKDD** *Nancy, France, 2014.*📄

⋄ **A unified statistical framework for crowd labeling**,
(J. Muhammadi, H. R. Rabiee, A. Hosseini), *Journal of Knowledge and Information Systems (**KAIS**)*(IF: 2.639), vol. 41, no. 1, October 2014.📄

⋄ **Spatial-Aware Dictionary Learning for Hyperspectral Image Classification**,
(A. Soltani, H. R. Rabiee, A. Hosseini), *IEEE Transactions on Geoscience and Remote Sensing* (IF: 3.467), vol. 53, no.1, pp. 527-541, 2015. 📄

◇ **Locality Preserving Discriminative Dictionary Learning**,
(S. Haghiri, H. R. Rabiee, A. Soltani, A. Hosseini, M. Shadloo), *IEEE International Conference in Image Processing (***ICIP***) 2014.*[PDF].

HONORS AND
AWARDS

◇ **Ranked 1ˢᵗ** in Iranian Nationwide University Entrance Exam for Ph.D. Students, 2014

◇ **Ranked 1ˢᵗ** in Cumulative GPA (19.55/20) among M.Sc. students of the artificial intelligence group, class of 2014 students, Department of Computer Engineering.

◇ **Gold Medal** in National Computer Olympiad for University Students, Summer 2012, Tehran

◇ Awarded Fellowship of National Elite Foundation of Iran for, 2012-2016

◇ **Ranked 1ˢᵗ** in Cumulative GPA (19.81/20) among about 120 B.Sc.students of the department, class of 2012 students, Department of Computer Engineering.

◇ Awarded Fellowship of Exceptional Talents of Sharif University of Technology for MSc. Program, 2012

◇ Awarded as **Outstanding Student** by university president, 2012

◇ Awarded **summer internship grant** from Swiss Federal Institute of Technology, Lausanne(EPFL), Summer 2011, Lausanne

◇ **Silver Medal** in Iranian National Olympiad in Informatics, 2007

INTERNSHIPS

Internship at Ecole Polytechnique Federale de Lausanne   **Summer 2011**
Laboratory For Probabilistic Machine Learning (LAPMAL)
Mentor: Prof. Matthias Seeger

RESEARCH
EXPERIENCE

◇ **Using Time Dependent Non-parametric models for Stream Classification**, at Digital Media Lab, Sharif University of Technology, 2014
In this work, we proposed a new model for stream classification using time dependent nonparametric models. This model can handle concept drift in stream classification problem properly. more details can be found in here.

◇ **HyperSpectral Image Classification Using Dictionary Learning**, at SSP group of DML at Sharif University of Technology, Fall 2012.
In this work, we proposed a structured dictionary-based model for hyperspectral data that incorporates both spectral and contextual characteristics of a spectral sample, with the goal of hyperspectral image classification. more details can be found in here.

◇ **Speeding up Experimental Design Using Variational Inference**, at LAPMAL lab at EPFL, Summer 2011
During this internship, I worked on speeding up MRI using compressed sensing (CS). In order to do so, I sped up two variational inference methods in order to accelerate the process of sampling matrix design.
More details can be found in the following technical report.[PDF]

TEACHING
EXPERIENCE

◇ **Teaching**
Engineering Probability and Statistics (B.Sc. Course), Sharif University of Technology, (Fall 2014, Fall 2015, Spring 2016, Fall 2016)

◇ **Teaching Assistant**
Stochastic Processes, Sharif University of Technology, (Fall 2013), Prof. Rabiee
Machine Learning, Sharif University of Technology, (Fall 2013), Dr. Soleymani

INDUSTRIAL
EXPERIENCE

◇ **Tapsell**, Summer 2015
Machine Learning Scientist
Tapsell is the leading mobile online advertising system in Iran with more than 15 million users. In Tapsell, I was a member of the data processing group. In this group, we designed and implemented personalized ad recommender system and fraud detection system.

◇ **Backtory**, Summer 2014
Software Engineer
Backtory is a mobile back-end as a service (mBaaS) platform that provides the perfect set of tools to free the developer from back-end programming. In Backtory, I was a member of a team that designed and developed a database as a service platform.

TALKS AND PRESENTATIONS	◇ **Stream Classification, A Bayesian Nonparametric Approach** in *Max Planck Institute for Intelligent Systems, Tubingen.*, Winter 2014.
	◇ **Graphical Models and Bayesian Inference** in *Digital Media Lab. Sharif University of Technology*, Summer 2012.
	◇ **Bayesian Modeling in Machine Learning** in *Digital Media Lab. Sharif University of Technology*, Spring 2012.

TEST SCORES

◇ **TOEFL** (Nov 2011): Internet-Based Test **102/120**
        Reading (27/30),*Listening* (25/30), *Speaking* (23/30), *Writing* (27/30).

SKILLS

◇ Programming Languages: Java, Python, C, C++, Matlab.

◇ Databases: MongoDB, Oracle, Postgres, Elasticsearch

◇ IDEs and Version Control Tools: Intellij IDEA, PyCharm, Eclipse, Git, SVN

◇ Virtualization and Containerization: VMWare, Docker, etc

◇ Continuous Delivery Toolset: Gitlab, Artifactory, Jenkins, Docker Registry

REFERENCES ◇ Prof. Hamid R. Rabiee
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Sharif University of Technology
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◇ Dr. Mohammad Hossein Rohban
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