AMIR BABAEIAN

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TECHNICAL STRENGTHS

Background Machine Learning, NLP, Graph Clustering, Optimization, Algorithm Design

Computer Languages SCALA, C++, MATLAB, R

Big data frameworks Spark, Hadoop, AWS
Tools Vim, Linux, SQL, Git

EDUCATION

University of California, San Diego

August 2015 Expected

PhD in Computational Mathematics & Statistics

Overall GPA: 3.98

Columbia university, data science institute

January-March 2015

Researcher

University of California, San Diego August 2013

M.Sc. in Statistics Overall GPA: 3.98

University College London, London, UK September 2010

One year program in Machine Learning

AmirKabir University of Technology, Tehran, Iran February 2009

M.Sc. in Electrical Engineering

Overall GPA: 16.68/20

University of Mazandaran, Babol, Iran

September 2006

B.Sc. in Electrical Engineering

Overall GPA: 16.01/20

EXPERIENCE

Big Data Company

April 2015 - Present

Senior Machine Learning & Big Data Engineer

NYC, NY

- · Building a probabilistic natural language processing software in Scala on top of apache spark in Terascale
- · Designing a self-curing entity resolution & curation engine
- · Recommender based online shopping system using customers behaviors and transactional data in Terascale

UC San Diego

September 2011 - January 2015

Machine learning researcher

San Diego, CA

- · Designing and implementing Community detection algorithm in large graphs in R
- · Designing and implementing interactive learning algorithm for online advertising in R
- · Designing and implementing Clustering algorithm for high dimensional data like video sequences(Manifold Learning)
- · Designing and implementing statistical language models for entity resolution in Scala

SELECTED PUBLICATIONS

Mean shift-based object tracking with multiple features, 41st Southeastern Symposium on System Theory, 2009

Angle constrained path for clustering of multiple manifolds, International Conference in Image Processing, ICIP 2015

Nonlinear subspace clustering Using Curvature Constrained Path, Journal of Pattern Recognition Consistency of Hierarchical Clustering in the Stochastic Block-model, Journal of Pattern Recognition Multi-Manifold learning and clustering using constrained path, Journal of Machine Learning research

TEACHING EXPERIENCE

Vector Calculus and Geometry, Fall 2013 and Spring 2014 at UC San Diego Linear Algebra, Spring 2013 and Winter 2014 at UC San Diego Applied Statistics, Fall 2012 and Winter 2013 at UC San Diego Signals and Systems, Fall 2005 at University of Mazandaran

AWARDS AND HONORS

Ranked first in statistics qualification exam among all the students in the department of Mathematics at UC San Diego.

Ranked 3rd among other graduating students in the major of electronics at university of Mazandaran by a GPA of 16.01/20 in 2006

One of the top 0.5 percent students among more than 400000 participants in the university entrance exam for B.Sc. degree in Iran.