

Ruhollah Shemirani

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- SUMMARY** ◇ PhD student with focus on Data Mining and Data Integration using machine learning and mathematical techniques. With strong software engineering background and experience in industry and startup. Known for excellence in teamwork, problem solving and presenting ideas. Interested in designing and implementation of information systems based on solid theoretical and mathematical ideas. Has sufficient experience and knowledge in full stack web programming. I am currently focused on studying an analysis of Genetic data.
- EDUCATION** ◇ **University Of Southern California** , Los Angeles, CA [Expected] 2018-19
Ph.D. in Computer Science, Data Mining and Data Integration - *GPA*: 3.7/4
- ◇ **Sharif University of Technology** , Tehran, Iran 2014
B.Sc. in Computer Engineering and Information Technology - *GPA*: 3.83/4
- SKILLS** ◇ *Programming*: Python, C++, Java, Node.js ◇ *Mobile*: Android Development, Apache Cordova
- ◇ *Web*: HTML, CSS, JS, JQuery, Django, PHP ◇ *DB*: MySQL, Postgres, Hadoop, MongoDB
- ◇ *High Performance*: CUDA, OpenMP, MPI ◇ Algorithms, Machine Learning, Linear Algebra
- EXPERIENCE** ◇ **Research Assistant at Information Sciences Institute**, USC. 2016-Current
Under supervision of Prof. Jose-Luis Ambite, I am working on record linkage problems using machine learning and statistical approaches.
- ◇ **Research and Teaching Assistant at SoftArch Lab**, USC. 2014-2016
Under Supervision of Prof. Nenad Medvidovic, I designed a framework to support secured, distributed architectures for context-aware Internet of Things application development in heterogeneous environments.
- ◇ **Research Assistant at SMART Lab.**, Iran 2013-2014
In a team, We designed and implemented Software as a Service(SaaS) solutions for organizations using web technologies and libraries like Django.
- ◇ **Product Specialist and Mobile application developer at Beep Co**, Iran 2013-2014
I co-founded a mobile application start-up with the support of Beep Co. We released two games together. Beep (Rahnema) is one of the major VAS providers and tech companies in Iran.
- ◇ **Software Engineer at Meraat Co.**, Iran 2011-2012
Designed, developed, and maintained a web portal for the company, which handles all business processes for them. We managed information of more than a million students in the portal.
- ◇ **Director of Students Scientific Council**, Sharif University of Technology 2012-2014
I was elected as a member and director of this committee, which is in charge of students academic and extra-curriculum activities in the department of computer engineering. There, I learned how to organize teams and activities of more than 100 people in various circumstances and events.
- NOTABLE PROJECTS** ◇ **I-Lash**: I have designed and implemented an ultra rapid solution to find the relations(IBD tracts) among people based on their DNA array data, using machine learning and statistical methods together with high performance computing techniques to reach a level of performance and precision that surpasses available techniques. The results of my work is accepted at the 2017 ASHG meeting as an abstract.
- ◇ **Extreme Pseudo-Sampling**: I have proposed a new way to rank genes in cancer survival analysis using RNA-seq data. Our results are to be submitted to Frontiers in Genetics.
- ◇ **DISC**: DISC is a framework for context-aware distributed software architectures on heterogeneous and scalable hardware environments such as smart homes and smart cities.
- ◇ **TRASE**: A tracking service solution consisting of an Android app and a web-based application, for tracking staff locations in a centralized manner. Provided as a SaaS solution for a major bank.
- ◇ **Android Framework Benchmark Tool**: A testing program to measure different aspects of a manipulated Android framework and to compare it to original Android OS.