Morteza Milani

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Professional Experience

July 2016 - March 2018

Technical Lead at Betterspot Technologies Inc.
Charged with leading the technical aspects of Betterspot project: from developing firmware to finding manufacturing partners. With a team of 3 software developers, a hardware designer and an industrial designer, we delivered the desired results.

Impact:

- Transformed Betterspot from a R&D project to a commercial product. When I got the position, the team was doing mostly R&D and there was little done to commercialize the product. I formed the code repositories, started firmware and application development and began searching for manufacturing partners.
- Was awarded a position to join HWTrek Asia Innovation Tour 2016. I presented Betterspot to thousands of manufacturers in China, visited factories and started negotiating with possible manufacturers. Now we have our partners in hardware industry.

July 2013 - July 2016

Software Development Manager at Betternet Technologies Inc.
Responsible for managing the development of Betternet applications and its backend system. Leading a team of 6 developers was challenging but with help of my colleagues, I overcame the difficulties. We published Betternet app for iOS, Android, Windows and as Browser Extensions and soon they reached the top of the app store.

Impact:

- Standardized the structure of repositories, codes and development cycle.
- Designed and implemented big data infrastructure we use to analyze users with an emphasis on having minimum cost.
- Negotiated with several firms like Newrelic, UK2 Group, etc. to reduce overall costs of the company.

July 2012 - July 2013

Senior Software Engineer at Pichak Co.
Responsible for developing technical solutions based on requirements of business team. During this period of time, I designed the architecture of several applications including VPN in Touch and Recordium.

Aug 2011 - July 2012

Web Developer, Dev Ops at Pichak Co.
Joined Pichak as backend web developer and evolved to DevOps managing linux servers, software repositories and providing tools requested by other developers.

Jan 2010 - June 2011

Early Career
Web Developer at Nahayat: Designed and developed a system for selling pavilions online, project from International Exhibition Venue of Tehran.
Web Developer at Netsups: Designed and developed templates for the Netsups CMS.

Education

Sept 2012 - Jan 2015
MSc in Computer Science, Shahid Beheshti University (National University of Iran)
GPA: 3.75/4.0
Thesis: Network completion problem survey on PPI networks
Grade: 19.85/20

The primary focus of the thesis is developing an efficient kernel function to compare proteins' tertiary structures. This kernel is then used with an SVM machine to classify pairs of proteins as interacting or non-interacting. Using this machine, learned on yeast PPI network, interactions between human proteins could be inferred with high accuracy. The results outperform many other algorithms in both runtime and accuracy.

Sept 2008 - July 2012
BSc of Computer Science, Shahid Beheshti University (National University of Iran)
GPA: 3.33/4.0
Supervisor: Dr. Ali Katanforoush

Project: Automatic web-based homework assessment system
Grade: 19.25/20

In this project, I developed a web-based application that allows instructors to create programming assignments and manage students' submissions as programs in C/C++. The system includes plagiarism detection and automatic evaluation of programs. The plagiarism detection system uses a novel algorithm based on GCC compiler optimization and an implementation of Winnowing algorithm by Saul Schleimer et al.

Research Experience

May 2014 - May 2015
Research Assistant at Institute for research in fundamental sciences (IPM)
Supervisors: Prof. Changiz Eslahchi, Dr. Mehdi Mirzaie
We worked on protein function and interaction prediction using machine learning approaches. We defined a kernel function based on the notion of graphlets that measures how similar are two graphs. We then modeled proteins' tertiary structures as contact graphs and used them in an SVM machine with our custom kernel to classify proteins into their functional families.

Honors & Awards

2015
Offered Admission to PhD in Bioinformatics Program based upon Exceptional Talent Policy *
By Computer Science Department of Shahid Beheshti University

2014
Elected as a member of Iran's National Elites Foundation
Awarded by Iran's National Elites Foundation as I was among the top 1% students

2012
Admission to M.Sc. Program based upon Exceptional Talent Policy *
Awarded by Computer Science Department of Shahid Beheshti University

2012
Graduation in Computer Science
3rd Rank in graduating class of students who enrolled in computer science in 2009

* Applying to graduate programs in Iran requires one to take Iran Nationwide Entrance Examination. Top 10% students can apply directly without taking this highly competitive exam.

Teaching & Talks

April 2014   **Exploratory Data Analysis**, Lab Demonstrator, Workshop on computational modeling in Cognitive Sciences, Cognitive Sciences Lab, Shahid Beheshti University

Jan 2012 - June 2012   **Database Systems**, Teaching Assistant and Lab Demonstrator, Computer Science Department, Shahid Beheshti University

Technical Skills

Programming: Python, Ruby, C++, Lua, Bash, Javascript, R

Tools & Frameworks: Node.js, Rails, iPython, Numpy, Scipy, Tensorflow, Keras, PyTorch

Softwares & Systems: Linux, MySQL, PostgreSQL, MongoDB, Redis, Docker

Languages

Persian Native

English Fluent

Test Scores

TOEFL iBT: 105 (Reading: 28, Listening: 29, Speaking: 22, Writing: 26)

IELTS General: 7 (Reading: 7.5, Listening: 7.5, Speaking: 6.5, Writing: 6.5)

Last updated: April 26, 2018