Mohammad Javad Mahzoon

Data Scientist
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Knowledgable in machine learning techniques and data mining tools. Interested in applying data mining for big data to discover patterns, specially working on sequences to identify trends and anomalies in data over time. Also, familiar with human computer interaction methods to design user interactions.

INTERESTS

Data mining and knowledge discovery in large datasets
Machine learning and pattern recognition in sequences

WORK EXPERIENCES

Data Scientist, CoreCompete Inc. — 2018-now
Developing machine learning methods to extract information from images and documents. Consulting clients and customers to leverage various data mining solutions on the Google Cloud Platform. Working in teams to provide machine learning solutions for client problems.

Research Assistant, Learning Analytics, UNC Charlotte — 2016-2018
Worked on student data extracted from the College of Computing and Informatics at UNC Charlotte. Analyzed temporal patterns of student data to identify students who are at-risk of not graduating on-time using a sequence data model. Developed dashboards to help faculty, advisors, and academic leadership to better understand at-risk students.
This research was funded by the College of Computing and Informatics at UNC Charlotte to help improve student's academic performance.

Teaching Assistant for Machine Learning Course, UNC Charlotte — 2015
Lectured the machine learning course offered for the Data Science and Business Analytics Department at UNC Charlotte. The instructor of record was Prof. Mirsad Hadzikadic.

Research Assistant, UNC Charlotte — 2015-2016
Worked as a research assistant in the Software and Information Systems department at UNC Charlotte under the NSF grant: "EAGER: Collaborative: Learning from crowdsourcing to improve the quality of citizen science contributions" (IIS- 1451079)

Teaching Assistant, Human Computer Interaction, UNC Charlotte — 2014

The human computer interaction course was offered in the Software and Information Systems Department at UNC Charlotte. The instructor was Prof. Mary Lou Maher.

Research Assistant, UNC Charlotte — 2013-2014

Worked as a research assistant in the Software and Information Systems department at UNC Charlotte under the NSF grant: "Crowdsourcing interaction design for citizen science virtual organizations" (IIS-1221513).

EDUCATION

2013-2018: *PhD*, Software and Information Systems, University of North Carolina at Charlotte, Charlotte, NC, USA.

> GPA: **3.85**
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> Thesis: (defended on May 2018) A Temporal Model For Exploring and Predicting Risk From Heterogeneous Student Data
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> Advisor: Dr. Mary Lou Maher
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> Graduation Date: May, 2018

2010-2013: *M.S.* in Computer Engineering, Major in Artificial Intelligence, Shiraz University, Shiraz, Iran. GPA: 17.57/20

2006-2010: *B.S.* in Computer Engineering, Major in Software, Shiraz University, Shiraz, Iran.

COMPUTER KNOWLEDGE, SKILLS AND CERTIFICATIONS

Certification: Google Cloud Professional Data Engineer

Data mining tools and AI frameworks: Python pandas and scikit-learn packages. Also familiar with Weka, ML related Matlab toolboxes, and ACT-R.

Big data: familiar with Pig Latin, HiveQL, Hadoop.

Database: SQL.

Programming Languages: Python, Java, C#, and Swift. Also familiar with Common Lisp, Matlab, Octave, Visual C/C++/C#, ASP.Net, PHP, JavaScript, HTML, and 8086 Assembly.

PUBLICATIONS

Mahzoon, M. J. (2018). Student Sequence Model: A Temporal Model For Exploring and Predicting Risk From Heterogeneous Student Data (Doctoral dissertation, The University of North Carolina at Charlotte).

Mahzoon, M. J., Maher, M. L., Eltayeby, O., Dou, W., & Grace, K. (2018). A Sequence Data Model for Analyzing Temporal Patterns of Student Data. Journal of Learning Analytics, 5(1), 55-74.

Mahzoon, M. J., Maher, M. L., Eltayeby, O., Dou, W., & Grace, K. (2018, July). A Framework for Interactive Exploratory Learning Analytics. In International Conference on Learning and Collaboration Technologies (pp. 319-331). Springer, Cham.

Dorodchi, M., Bendict, A., Desai, D., & **Mahzoon, M. J** (2018, February). Reflections are Good!: Analysis of Combination of Grades and Students' Reflections using Learning Analytics. In Proceedings of the 49th ACM Technical Symposium on Computer Science Education (pp. 1077-1077). ACM.

Maher, M.L. and **Mahzoon, M.J.** (2015). Finding Unexpected Patterns in Citizen Science Contributions Using Innovation Analytics, Conference on Collective Intelligence.

Grace, K., Grace, S., Maher, M. L., **Mahzoon, M. J.**, Lee, L., LoCurto, L., & Outcault, B. (2017). The Willful Marionette: Exploring Responses to Embodied Interaction. In Proceedings of the 2017 ACM SIGCHI Conference on Creativity and Cognition (pp. 15- 27). ACM.

Mahzoon, M. J., Maher, M. L., Grace, K., LoCurto, L., & Outcault, B. (2016). The Willful Marionette: Modeling Social Cognition Using Gesture-Gesture Interaction Dialogue. In International Conference on Augmented Cognition (pp. 402-413). Springer Publishing.