Mohammad Amin Morid

Assistant Professor
Department of Information Systems & Analytics
Leavey School of Business
Santa Clara University

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EDUCATION

Ph.D., Business Administration - Information Systems
University of Utah, 2013-2018.
Dissertation: *Leveraging Temporal Patient Data for Enhanced Healthcare Predictive Analytic*

M.Sc., Information Technology - Electronic Commerce
Amirkabir University of Technology, 2009-2011.
Thesis: *Security Improvement of Recommender Systems by Analysis and Modeling of Influence Based Attacks*

B.Sc., Software Engineering
Amirkabir University of Technology, 2005-2009.

RESEARCH INTERESTS

Big Data Analytics for Healthcare   Recommender Systems and Personalization

Predictive Modeling for Temporal Data   Trust and Reputation Systems

Healthcare Cost Analysis   Business Intelligence Solutions

Deep Learning for Temporal Data   Fraud Detection and Credit Scoring in Banking

PUBLICATIONS

Journals

Morid, M.A., Borjali, A., Del Fiol, G. "A scoping review of transfer learning research on medical image analysis using ImageNet ". *Computers in Biology and Medicine*, 128, 104115, 2021 (*Link*).

Borjali, A., Chen, A.F., Bedair, H.S., Muratoglu, O.K., **Morid, M.A.**, Varadarajan, K.M. "Comparing the performance of a deep convolutional neural network with orthopaedic surgeons on the identification of total hip prosthesis design from plain radiographs". *Medical Physics*, 2021 (*Link*).

Morid, M.A., Sheng, O.R.L., Kawamoto, K., Ault, T., Dorius, J., Abdelrahman, S. "Learning Hidden Patterns from Patient Multivariate Time Series Data Using Convolutional Neural Networks: A Case Study of Healthcare Cost Prediction". *Journal of Biomedical Informatics (JBI)*, 111, 103565, 2020 (*Link*).

Morid, M.A., Sheng, O.R.L., Del Fiol, G., Facelli, J.C., Bray, B.E., Abdelrahman, S. "Temporal Pattern Detection to Predict Adverse Events in Critical Care: Case Study With Acute Kidney Injury". *Journal of Medical Internet Research (JMIR) Medical Informatics*, 8, 3, e14272, 2020 (*Link*).

Borjali, A., Chen, A.F., Muratoglu, O.K., **Morid, M.A.**, Varadarajan, K.M. "Detecting total hip replacement prosthesis design on plain radiographs using deep convolutional neural network". *Journal of Orthopaedic Research (JOR),* 38, 7, 1465-1471, 2020 (*Link*).

Morid, M.A., Sheng, O.R.L., Kawamoto, K., Ault, T., Dorius, J., Abdelrahman, S. "Healthcare cost prediction: Leveraging fine-grain temporal patterns". *Journal of Biomedical Informatics (JBI)*, 91, 103-113, 2019 (*Link*).

Bian, J., **Morid, M.A**., Jonnalagadda, S., Luo, G., and Del Fiol, G. "Automatic Identification of High Impact Articles in PubMed to Support Clinical Decision Making". *Journal of Biomedical Informatics (JBI),* 73, 95-103, 2017 (*Link*).

Morid, M.A., Fiszman, M., Raja, K., Jonnalagadda, S. and Del Fiol, G. "Classification of Clinically Useful Sentences in Clinical Evidence Resources". *Journal of Biomedical Informatics (JBI),* 60, 14-22, 2016 (*Link*).

Morid, M.A., Shajari, M., Hashemi, A.R. "Defending Recommender Systems by Influence Analysis". *Information retrieval,* 17, 2, 137-152, 2013 *(Link).*

Morid, M.A., Shajari, M. "An Enhanced E-Commerce Trust Model for Community Based Centralized Systems". *Electronic Commerce Research (ECR)*, 12, 4, 409-427, 2012 (*Link).*

Conferences

Morid, M.A., Sheng, O.R.L, Kawamoto, K., Abdelrahman, S. "Leveraging Multivariate Time Series of Claims Data Using Deep Learning Methods For Healthcare Cost Prediction". Data Mining and Machine Learning in Healthcare, INFORMS, October 20-23, Seattle, Washington, 2019 (*Link*).

Morid, M.A., Kawamoto, K., Ault, T., Dorius, J., Abdelrahman, S. "Supervised Learning Methods for Predicting Healthcare Costs: Systematic Literature Review and Empirical Evaluation". In Proc. of American Medical Informatics Association (AMIA), November 4-8, Washington, DC, 2017 (*Link*).

Morid, M.A., Sheng, O.R.L., Abdelrahman, S. "Leveraging Patient Similarity and Time Series Data in Healthcare Predictive Models". In Proc. of Healthcare Informatics & Health Information Technology (SIGHealth), 23th Americas Conference on Information Systems (AMCIS), August 10-12, Boston, MA, 2017 - 7th Annual Workshop on Health IT and Economics (WHITE), October 21-22, Washington, DC, 2016 (*Link).*

Morid, M.A., Sheng, O.R.L., Abdelrahman, S. "Healthcare Predictive Analytics for Patient Time Series with Non-ignorable Missingness: The Case of Early ICU Mortality Prediction ". In Proc. of 11th Data Mining & Decision Analytics (DMDA), INFORMS, November 13-16, Nashville, Tennessee, 2016 (*Best Paper Award*).

Morid, M.A., Sheng, O.R.L., Abdelrahman, S. "PPMF: A Patient-based Predictive Modeling Framework for Early ICU Mortality Prediction ". Healthcare Analytics and Medical Decision Making, INFORMS, November 13-16, Nashville, Tennessee, 2016 (*Link).*

Morid, M.A., Jonnalagadda, S., Fiszman, M., Raja, K., Del Fiol, G. "Classification of Clinically Useful Sentences in MEDLINE". In Proc. of American Medical Informatics Association (AMIA), November 14-18, San Francisco, California, 2015-2024, 2015 (*Link).*

Morid, M.A., Sheng, O.R.L. "Unusual Side Effect Opinion Detection". 25th Workshop on Information Technologies and Systems (WITS), December 12-13, Dallas, Texas, 2015.

Morid, M.A., Sheng, O.R.L. "Spam Drug Review Detection Using Unsupervised Learning". In Proc. of 10th Data Mining & Decision Analytics (DMDA), INFORMS, November 1-4, Philadelphia, Pennsylvania, 2015.

Morid, M.A., Shajari, M., Hashemi, A.R. "Who are the Most Influential Users in a Recommender System?". In Proc. of 13th International Conference on Electronic Commerce, August 3-5, Liverpool, England, 2011 (*Link).*

Morid, M.A., Omidvar, A., Shahriari, H.R. "An Enhanced Method for Computation of Similarity between the Contexts in Trust Evaluation using Weighted Ontology". In Proc. of 10th IEEE International Conference on Trust, Security and Privacy in Computing and Communications, November 16-18, Changsha, China, 721 -725, 2011 (*Link).*

Aghili, Gh., Shajari, M., Khadivi, Sh., **Morid, M.A.** "Using Genre Interest of Users to Detect Profile Injection Attacks in Movie Recommender Systems". In Proc. of 10th IEEE International Conference on Machine Learning and Applications, December 18-21, Hawaii, USA, 49 – 52, 2011 (*Link).*

Morid, M.A., Ghasabzadeh, N., Hashemi, A.R. "Selection of the Most Effective Indicators for Organizations in Uncertain Environment using Expert Systems Based on Neural Networks ". In Proc. of 7th International Conference on Strategic Management, September 27-29, Tehran, Iran, 57 – 68, 2010.

TEACHING EXPERIENCE

Social Media Analytics (Undergraduate)
Instructor, ISA Department, Leavey School of Business, Santa Clara University, U.S.A., 2020 - Current.

Database Management Systems (Undergraduate)
Instructor, ISA Department, Leavey School of Business, Santa Clara University, U.S.A., 2018 - Current

Big Data Analytics (Graduate)
Instructor, OIS Department, David Eccles School of Business, University of Utah, U.S.A., 2018.

Business Statistics (Undergraduate) – *Best Teaching Excellence Award*
Instructor, OIS Department, David Eccles School of Business, University of Utah, U.S.A., 2016 - 2017.

Advanced Data Mining (Graduate)
Teaching Assistant, OIS Department, David Eccles School of Business, University of Utah, US.A., 2014 - 2017

Advanced Database Systems (Graduate)
Teaching Assistant, CEIT Department, David Eccles School of Business, University of Utah, U.S.A., 2014.

E-Commerce Security (Graduate)
Teaching Assistant, CEIT Department, Amirkabir University of Technology, Iran, 2011.

Principles of Data Mining Concepts (Undergraduate)
Teaching Assistant, CEIT Department, Amirkabir University of Technology, Iran, 2010 - 2012.

Data Mining Techniques and Applications (Graduate)
Teaching Assistant, CEIT Department, Amirkabir University of Technology, Iran, 2010.

Principles of Compiler Design (Undergraduate)
Teaching Assistant, CEIT Department, Amirkabir University of Technology, Iran, 2009.

WORK EXPERIENCE

Assistant Professor, Santa Clara University
Santa Clara, California, United States, Sep 2018 – Present.

Healthcare Analytics Data Science Consultant
Gilead Sciences, Inc., California, United States, Jan 2020 – Dec 2020.

Senior Data Scientist in Knowledge Management and Mobilization (KMM)
University of Utah Health Care, Salt Lake City, Utah, United States, May 2015 – Jan 2016.

Design Manager for Business Intelligence Fraud Detection Systems in Iran's Mellat Bank
Tehran, Iran, November 2011 – Aug 2013.

Senior Designer for Business Intelligence Marketing Systems in Iran's Post Bank
Tehran, Iran, July 2011 – Feb 2012.

Senior Developer for Business Intelligence Credit Scoring Systems in Iran's Saderat Bank
Tehran, Iran, June 2010 – July 2011.

JOURNAL REFEREE

Management Information Systems Quarterly (MISQ), Journal of Biomedical Informatics (JBI), Information Systems Research (ISR), Journal of the American Medical Informatics Association (JAMIA), ACM Transactions on Management Information Systems (TMIS), Decision Support Systems (DSS), Journal of Medical Internet Research (JMIR), Journal of Artificial Intelligence Research (JAIR), BMC Medical Informatics and Decision Making, PLOS ONE, Artificial Intelligence Review (AIRE)

SKILLS

RapidMiner (Expert)	MySQL Workbench (Expert)	Python (Expert)
Weka (Expert)	IBM Cognos (Intermediate)	Java (Expert)
R (Expert)	Microsoft Business Intelligence (Expert)	C# (Expert)
Tensorflow (Expert)	Microsoft Azure (Expert)	Groovy (Expert)
Spark (Expert)	Microsoft SQL Server (Expert)	Stata (Expert)
STATISTICA (Intermediate)	Microsoft Office (Expert)	PostgreSQL (Expert)
MATLAB (Intermediate)	Hadoop (Intermediate)	Tableau (Expert)
SPSS (Intermediate)		PHP (Intermediate)