Amin Hosseiny Marani

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EDUCATION

Lehigh University, Bethlehem, PA   *August 2018 - Present*
PhD, Computer Science   GPA: 3.71/4
Relevant Coursework: Machine Learning, NLP, Social Computing, Data Mining, Advanced Programming
Iran University of Science and Technology, Tehran, Iran   *2011 - 2014*
Master of Computer Engineering   GPA: 15.13/20
Relevant Coursework: Machine learning, Distributed AI, Neural Networks, Pattern Recognition
Shahid Chamran University, Ahvaz, Iran   *2007 - 2011*
Bachelor of Computer Engineering   GPA: 14.53/20 (Top 5%)

PUBLICATION

Amin Hosseiny Marani and Eric P. S. Baumer. 2023. A Review of Stability in Topic Modeling: Metrics for Assessing and Techniques for Improving Stability. ACM Computing Surveys (CSUR).

Amin Hosseiny Marani, Joshua Levine, and Eric P. S. Baumer. 2022. One Rating to Rule Them All? Evidence of Multidimensionality in Human Assessment of Topic Labeling Quality. In Proceedings of the 31st ACM International Conference on Information and Knowledge Management (CIKM '22), October 17–21, 2022, Atlanta, GA, USA. ACM, New York, NY, USA, 12 pages.

EXPERIENCE

Infinitus Systems   San Francisco, CA
NLP Researcher (internship)   *June 2023 - September 2023*
- Designed a **Graph Neural Network** empowered by **LLMs** (i.e., GPT) to predict next action for call automation over-performing the current system in successful call rate by 30% (published in NAACL 2024).

Dana-Farber Cancer Institue | Harvard Medical School   Boston, MA
NLP Data Scientist (internship)   *April 2021 - January 2022*
- Designed a new clinical text summarization pipeline using a combination of database techniques, traditional machine learning methods, and **deep learning transformers (e.g., BERT and BioBERT)**.

DESIGN, ALGORITHMS, AND SOCIETY (DAS) LAB   Lehigh University, Bethelehem, PA
Graduate Research Assistant   *2018-present*
- Designed a new labeling machine learning based evaluation model by combining a novel trained **Graph Neural Network** on article-frame features and BERT features of articles.
- Managed a study to capture race bias in machine learning evaluation by collecting human data through surveys, exploring features, and employing **statistical techniques** (e.g., Logistic Regression and ANOVA).

SERVICES AND ACTIVITIES

President and Vice of the Iranian Students Association at Lehigh University (LUISA)   2021-2023
Co-organized 20 events for graduate students and 5 public events
Secretary of Graduate Student Senate at Lehigh University   2022-2023
CSE Department Representative   2021-2023
Member of Upsilon Pi Epsilon society   2021-present
Reviewer   NeuroComputing Journal
Reviewer of an Elsevier journal in the field of neural networks and machine learning   2017-present
Reviewer   SAGE Open
Reviewer of SAGE Journals in the field of topic modeling and social science   2021-present
Reviewer   ACM CHI
Reviewer of ACM CHI conference in Human-Computer-interaction and NLP applications   2021-present
Reviewer   ACM CSCW
Reviewer of ACM Conference On Computer-Supported Cooperative Work And Social Computing 2021-present

COMPETITIONS AND AWARDS

Lehigh University Graduate Life Leadership Award   2023
Lehigh University Graduate Engineering Leadership and Service Award   2023
SIGIR Student Grant   2022
One of four finalist teams in eBay 2021 University Machine Learning Competition   2021