HAMED REZANEJAD ASL BONAB

College of Information and Computer Sciences \diamond University of Massachusetts Amherst, MA +1 (631) 215 4176 \diamond bonab@cs.umass.edu

RESEARCH INTERESTS

Information Retrieval, Machine Learning, Data/Text Mining, Stream Processing

EDUCATION

Ph.D. in Computer Science

(2017 - Present)

College of Information and Computer Sciences, UMass Amherst, MA, USA

Center for Intelligent Information Retrieval (CIIR)

Research Topic: "Domain-Specific Cross Language Information Retrieval"

Supervisor: Prof. James Allan

M.Sc. in Computer Engineering

(2014 - 2016)

Computer Engineering Department, Bilkent University, Ankara - Turkey

Bilkent Information Retrieval Group (BilIR)

Thesis Topic: "Geometrically Optimum and Online Weighted Ensemble Classifier (GOOWE) on Evolving Data Streams"

Supervisor: Prof. Fazli Can

B.Sc. in Computer Engineering - Software

(2008 - 2013)

Computer Engineering Department, Iran University of Science and Technology (IUST), Tehran - Iran Last 60 Credits GPA: 17.01/20

PUBLICATIONS

- [1] Ö. Gözüaçık, A. Büyükçakir, **H. Bonab**, and F. Can, "Unsupervised concept drift detection with a discriminative classifier," *CIKM'19*, 2019. [To appear]
- [2] **H. Bonab**, J. Allan, and R. Sitaraman, "Simulating CLIR translation resource scarcity using high-resource languages," *ICTIR'19*, 2019. [To appear]
- [3] **H. Bonab**, M. Aliannejadi, J. Foley, and J. Allan, "Incorporating hierarchical domain information to disambiguate very short queries," *ICTIR'19*, 2019. [To appear]
- [4] S. Sarwar, H. Bonab, and J. Allan, "A multi-task architecture on relevance-based neural query translation," ACL'19, 2019.
- [5] **H. Bonab** and F. Can, "Less is more: A comprehensive framework for the number of components of ensemble classifiers," *IEEE TNNLS*, 2019. [Impact factor: 7.98]
- [6] **H. Bonab**, H. Zamani, E. Learned-Miller, and J. Allan, "Citation worthiness of sentences in scientific reports," in *Proc. of* SIGIR'18. ACM, 2018, pp. 1061–1064.
- [7] A. Büyükçakir, **H. Bonab**, and F. Can, "A novel online stacked ensemble for multi-label stream classification," in *Proc. of CIKM'18*. ACM, 2018, pp. 1063–1072.
- [8] **H. R. Bonab** and F. Can, "GOOWE: Geometrically optimum and online-weighted ensemble classifier for evolving data streams," **ACM TKDD**, vol. 12, no. 2, p. 25, 2018.
- [9] **H. R. Bonab** and F. Can, "A theoretical framework on the ideal number of classifiers for online ensembles in data streams," in *Proc. of CIKM'16*. ACM, 2016, pp. 2053–2056.

RESEARCH EXPERIENCE

Dataminr, Research Internship

May 2019 - Aug 2019

· Artificial Intelligence (AI) team, NY - USA

UMass Amherst, Research Assistant

Sep 2017 - Present

· Center for Intelligent Information Retrieval (CIIR), MA - USA

Bilkent University, Research Assistant

Jan 2014 - Dec 2016

· Bilkent Information Retrieval Group (BilIR), Ankara - Turkey

TECHNICAL STRENGTHS

Computer Languages
Database Management
Operating Systems
Tools

Python, Java, C++, Matlab, R, PHP, HTML, CSS, JavaScript, Android

Microsoft SQL, MySQL, Oracle lite GNU Linux, Microsoft Windows

Lemur, Galago, TensorFlow, MOA, Weka, Arena Computer Simulation, Opnet Network Analysis, Visual Paradigm, Asterisk PBX Fram-

ework, LATEX

R&D PROJECTS

Domain-Specific Cross Language Information Retrieval

September 2017 - Present

- · Cross language information retrieval using domain information, IARPA Project, UMass Amherst
- · Short query disambiguation using hierarchical domain information, UMass Amherst

Ensemble Methods for Evolving Data Streams

January 2014 - January 2016

· Concept drifting stream processing using ensemble methods, Bilkent University

Intelligent Tutoring Systems (ITS)

February 2013 - September 2013

· Educational Data Mining and Machine Learning Systems, B.Sc. Thesis project, IUST University

Android Programming

June 2013 - July 2013

· Prized Android Application called DangiDongi, Cafebazaar.ir

Persian Transliteration between Arabic and Latin Scripts

September 2010 - January 2011

· NLP techniques and N-Gram Language Model, IUST University

LANGUAGE PROFICIENCY

English (Advanced), Turkish (Advanced), Persian (Native), Azerbaijani (Native), Arabic (Basic)

EXTRA CURRICULAR ACTIVITIES

Oil Painting, Nasta'liq Calligraphy, Table Soccer, Rock Climbing