

HAMED BONAB

College of Information and Computer Sciences ◊ University of Massachusetts Amherst, MA
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RESEARCH INTERESTS

Information Retrieval, Natural Language Processing, Machine Learning

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: “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 (BillR)

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] Y. Yu, J. Karlgren, **H. Bonab**, A. Clifton, I. Tanveer, R. Jones, “Spotify at the TREC 2020 Podcasts Track: Segment Retrieval,” in *TREC 2020*.
- [2] A. Clifton, S. Reddy, Y. Yu, A. Pappu, R. Rezapour, **H. Bonab**, J. Karlgren, B. Carterette and R. Jones, “100,000 podcasts: A large-scale spoken document corpus,” in *Proc. of COLING’20*.
- [3] **H. Bonab**, S. Sarwar, and J. Allan, “Training effective neural CLIR by bridging the translation gap,” in *Proc. of SIGIR’20*. 2020, p. 9–18.
- [4] Ö. Gözüaık, A. Büyükakir, **H. Bonab**, and F. Can, “Unsupervised concept drift detection with a discriminative classifier,” in *Proc. of CIKM’19*. 2019, p. 2365–2368.
- [5] **H. Bonab**, J. Allan, and R. Sitaraman, “Simulating CLIR translation resource scarcity using high-resource languages,” in *Proc. of ICTIR’19*. 2019, p. 129–136.
- [6] **H. Bonab**, M. Aliannejadi, J. Foley, and J. Allan, “Incorporating hierarchical domain information to disambiguate very short queries,” in *Proc. of ICTIR’19*. 2019, p. 51–54.
- [7] S. Sarwar, **H. Bonab**, and J. Allan, “A multi-task architecture on relevance-based neural query translation,” in *Proc. of ACL’19*. 2019, p. 6339–6344.
- [8] **H. Bonab**, and F. Can, “Less is more: A comprehensive framework for the number of components of ensemble classifiers,” *IEEE TNNLS*, 2019. [**Impact factor: 11.683**]
- [9] **H. Bonab**, H. Zamani, E. Learned-Miller, and J. Allan, “Citation worthiness of sentences in scientific reports,” in *Proc. of SIGIR’18*. 2018, p. 1061–1064.
- [10] A. Büyükakir, **H. Bonab**, and F. Can, “A novel online stacked ensemble for multi-label stream classification,” in *Proc. of CIKM’18*. 2018, p. 1063–1072.

- [11] **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.
- [12] **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*. 2016, p. 2053–2056.

EMPLOYMENT

- Spotify, Research Internship** June 2020 - Aug 2020
 · Natural Language Processing (NLP) team, MA - USA
- Dataminr, Research Internship** May 2019 - Aug 2019
 · Artificial Intelligence (AI) team, NY - USA
- UMass Amherst, Research Assistant** Sept 2017 - Present
 · Center for Intelligent Information Retrieval (CIIR), MA - USA
- Bilkent University, Teaching and Research Assistant** Jan 2014 - Dec 2016
 · Bilkent Information Retrieval Group (BilIR), Ankara - Turkey

ACADEMIC SERVICES & ACHIEVEMENTS

- Co-Organizing Workshop on Cross-Market Recommendation (XMRec), RecSys, 2021
- Passed PhD candidacy “with distinction”, UMass Amherst, 2019
- Conference/Journal Peer Reviewer: (a) EMNLP’20 (b) ACL’20 (c) ECIR’19 (d) CIKM’18 & ’17 (e) ACM TKDD (f) IEEE TNNLS (g) JASIST (h) Neural Computing and Applications (NCAA) (i) IEEE Transactions on Industrial Informatics

TECHNICAL STRENGTHS

Programming Languages Python, Java, C++, Matlab, PHP, HTML, JavaScript, Android
Tools and Libraries PyTorch, TensorFlow, Galago, Lemur, MOA

R&D PROJECTS

- Better Extraction from Text Towards Enhanced Retrieval** Sept 2020 - Present
 · Extracting fine-grained semantic information, with a focus of events, across multiple languages and problem domains (BETTER), UMass Amherst
- Cross-Language Information Retrieval for Low-Resource Languages** Sept 2017 - Sept 2020
 · Machine Translation for English Retrieval of Information in Any Language (MATERIAL), UMass Amherst
- Ensemble Methods for Evolving Data Streams** Jan 2014 - Jan 2016
 · Concept drifting stream processing using ensemble methods, Bilkent University

LANGUAGE PROFICIENCY

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

EXTRA CURRICULAR ACTIVITIES

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