Arman Cohan

Department of Computer Science
Georgetown University
329A, Saint Mary's Hall, 3700 O St NW
Washington, DC 20057

📱 +1 (202)-509-3830
✉ arman@ir.cs.georgetown.edu
🌐 http://www.armancohan.com

Objective

- A research-oriented internship in areas related to Natural Language Processing, Machine Learning, or their applications in medical/health-related text

Education

- **Doctor of Philosophy in Computer Science**   *2013 – 2018 (Expected)*
  Georgetown University, Washington DC, USA

    – *Natural Language Processing, Information Retrieval, & Applications in Medical/Health-Related Text*
    – *Advisor: Dr. Nazli Goharian*

- **Master of Science in Information Technology**   *2010 – 2012*
  Amirkabir University of Technology, Tehran, Iran

    – *E-Commerce & E-Business*

- **Bachelor of Science in Information Technology**   *2006 – 2010*
  with distinction
  Amirkabir University of Technology, Tehran, Iran

Publications

2017

- **Arman Cohan**, Allan Fong, Nazli Goharian, and Raj Ratwani
  "A Neural Attention Model for Categorizing Patient Safety Events"
  European Conference on Information Retrieval (ECIR 2017) [to appear].

2016

- **Arman Cohan**, Sydney Young, and Nazli Goharian
  "Triaging Mental Health Forum Posts"
  NAACL 2016 Workshop on Computational Linguistics and Clinical Psychology (CLPsych 2016).

- **Arman Cohan**, Kevin Meurer, and Nazli Goharian
  "Temporal Information Processing in Clinical Narratives"
  International Workshop on Semantic Evaluation (SemEval 2016)

- **Arman Cohan**, Luca Soldaini, and Nazli Goharian, Allan Fong, Ross Filice, Raj Ratwani
  "Identifying Significance of Discrepancies in Radiology Reports"
  SIAM International Conference on Data Mining
  Workshop on data Mining for Medicine and Healthcare, (SDM-DMMH 2016)

- **Arman Cohan** and Nazli Goharian
  "Revisiting Summarization Evaluation for Scientific Articles"
  Language Resources and Evaluation (LREC 2016)

- **Arman Cohan** and Nazli Goharian
"Scientific Article Summarization Using Citation-Context and Article's Discourse Structure"
Empirical Methods for Natural Language Processing (EMNLP 2015)

- **Arman Cohan**, Luca Soldaini, and Nazli Goharian
"Matching Citation Text and Cited Spans in Biomedical Literature: a Search-Oriented Approach."
North American Chapter of the Association for Computational Linguistics (NAACL 2015).

2014

- Luca Soldaini, **Arman Cohan**, Andrew Yates, Nazli Goharian, and Ophir Frieder
"Retrieving Medical Literature for Clinical Decision Support."
European Conference on Information Retrieval (ECIR 2015).

- **Arman Cohan**, Luca Soldaini, and Nazli Goharian
"Towards Citation-Based Summarization of Biomedical Literature."
Text Analysis Conference (TAC 2014).

- Luca Soldaini, **Arman Cohan**, Andrew Yates, Nazli Goharian, and Ophir Frieder.
"Query Reformulation for Clinical Decision Support Search."
Text Retrieval Conference (TREC 2014).

- **Arman Cohan**, Luca Soldaini, Andrew Yates, Nazli Goharian, and Ophir Frieder.
"On Clinical Decision Support."
ACM Bioinformatics, Computational Biology, and Health Informatics (BCB 2014).

Patents

- "Systems and Methods for Identifying Critical Errors that can be Used for Targeted Radiology Resident Training." Assignee: Medstar Institute for Innovation (MI2), Provisional Application, Serial No. 62/280,883.
Co-Inventors by alphabetical order: Ross Filice, Allan Fong, Ophir Frieder, Nazli Goharian, Raj Ratwani, Luca Soldaini

Talks

- May. 2016, Miami, CA, USA – SDM Conference
"Identifying Significance of Discrepancies in Radiology Reports"
- Oct. 2015, Oeiras, Portugal, Instituto Gulbenkian de Ciencia (IGC)
"Text Summarization in Biomedical Domain"
- Sep 2015, Lisbon, Portugal – EMNLP Conference
"Scientific Article Summarization Using Citation-Context and Article's Discourse Structure"
- June 2015, Denver, CO, USA – NAACL Conference
"Matching Citation Text and Cited Spans in Biomedical Literature: a Search-Oriented Approach."
- Nov. 2014, Gaithersburg, MD, USA – TAC Conference
"Towards Citation-Based Summarization of Biomedical Literature."

Awards

- Georgetown University's merit-based fellowship award *2013, 2014, 2015, 2016*
- Best poster award (second place) - Innovation Center for Biomedical Informatics (ICBI) *2014*
- ACM BCB Travel Award *2014*

- Outstanding undergraduate student award and direct admission to M.Sc. program in the same school   *2010*
- Ranked in the top 1% of Iranian National universities Entrance Exam   *2006*
- Certificate of Distinction in University of Waterloo's Euclid International Mathematics Contest   *2005*
- Accepted in the first round of 3 National Olympiads (Mathematics, Computer Science, and Physics).   *2005*

Supervision

- Sydney Young, Undergraduate Project Supervision   *Spring & Summer 2016*
- Kevin Meurer, Undergraduate Project Supervision   *Fall 2015, Spring 2016*

Research and Teaching Experience

- **Research Assistant**   *2013 - Present*
  Information Retrieval Lab   *Department of Computer Science, Georgetown University, Washington DC, USA*
  Projects:
  - *Text Summarization*
  - *Citation Analysis*
  - *Summarization Evaluation*
  - *Medical Information Extraction*
  - *Medical Text Processing*
  - *Health Related Social Media Mining*

  Advisor: Dr. Nazli Goharian:

- **Internships**
  - *Research Intern*   *Summer 2016*
    Medstar Health Research – Medstar Institute for Innovation (MI2) , Washington, DC
    Supervisor: Dr. Raj Ratwani
    Project: Identifying Harm in Patient Safety Reports
  - *Research Intern*   *Summer 2015*
    Medstar Health Research – Medstar Institute for Innovation (MI2) , Washington, DC
    Supervisor: Dr. Raj Ratwani
    Project: Identifying Critical Discrepancies in Medical Notes

- **Teaching Assistantship**
  Georgetown University, Computer Science
  - Data Mining   *Spring 2015, 2016*
  - Intro. to Information Retrieval   *Fall 2014, 2015, 2016*
  - Database Systems   *Spring 2015*
  - Intro. to Information Systems,   *Spring 2014*

Technical Skills & Languages

- Knowledge   *Machine Learning, Natural Language Processing, Deep Learning, Text Analytics, Information Retrieval/Extraction, Medical/Biomedical Text Processing and Analytics*
- Programming   *Main language:* Python, *also familiar with* Java, C++, C#
- Libraries & tools   *TensorFlow, Keras, numpy, pandas, Scikit-learn, spacy*
- Databases   *Mongo, MySQL, PostgreSQL*
- Tools   *Git, Vim*
- Languages   *English (Fluent), Persian (Native), Turkish (Familiar), French (Beginner)*