

Reza Asadi

College of Computer and Information Science
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EDUCATION

- Northeastern University**, Boston, MA Sept. 2012 - Present
Doctor of Philosophy in Computer Science
Thesis Title: Presentation Tracking using Confusion Networks, Semantic Matching, and Keyword Weighting
Current GPA: **3.9/4.0**
- Northeastern University**, Boston, MA Sept. 2010 - May 2012
Master of Science in Computer Science
- Amirkabir University of Technology**, Tehran, Iran Sept. 2007 - Jan. 2010
Master of Science in Mechatronics
- Sharif University of Technology**, Tehran, Iran Sept. 2003 - Sept. 2007
Bachelor of Science in Mechanical Engineering

COMPUTER KNOWLEDGE

Programming Languages: C#, Java, MATLAB, C++, Python, SQL, R, Racket
Speech Processing: Praat, Pocketsphinx, openSMILE, Wavesurfer
Programming Tools: Microsoft Visual Studio, Android Studio, IntelliJ, Unity
Web Development: PHP, HTML, CSS, JavaScript, jQuery, ASP.NET

RESEARCH EXPERIENCE

Northeastern University, Boston, MA Jan. 2012 - Present
College of Computer and Information Science

Government funded research:

- Developed and evaluated a speech-based teleprompter integrated in PowerPoint and displayed on Google Glass. (ICMI'17)
- Developed a system for speech quality assessment and listening behaviour. (UbiComp'17)
- Developed and evaluated a speech-based presentation tracker. (Interspeech'16)
- Developed software for detecting specific hospital alarms. (IVA'15)
- Applied machine learning methods to investigate the correlation between the acoustic features of speech and the speaker's mental health.
- Developed parts of an R plugin and a Wavesurfer plugin included in SpeechMark software tools for detecting acoustic landmarks in speech files.

Non-government funded research:

- Applied machine learning methods for recognizing emotions from speech in MATLAB. (ASA'15)
- Implemented speech recognition and emotion classification for a virtual agent used in depression therapy.

WORK EXPERIENCE

GMO LLC, Berkeley, CA

May 2011 - Dec. 2011

Software Engineering Intern

Quantitative Equity division

- Designed and implemented parts of a software architecture for retrieval, analysis, reporting and storing of stock market data using Java, MATLAB and C#
- Developed a graphical user interface for retrieval and presentation of market data using MATLAB
- Developed a unit test coverage report system and unit tests using MATLAB

TEACHING EXPERIENCE

Northeastern University, Boston, MA

Co-Instructor

May 2015 - June 2015

Object Oriented Design

- Presented lectures on object oriented design patterns in Java for 27 students.
- Participated in designing homeworks and exams.

Head Teaching Assistant

Jan. 2015 - April 2015

Object Oriented Design

PUBLICATIONS

- **IntelliPrompter: Speech-Based Dynamic Note Display Interface for Oral Presentations**
R. Asadi, H. Trinh, H. J. Fell, and T. W. Bickmore. 2017.
Proc. ACM International Conference on Multimodal Interaction.
- **RoboCOP: A Robotic Coach for Oral Presentations**
H. Trinh, R. Asadi, D. Edge, and T. Bickmore. 2017.
Proc. ACM Interact. Mob. Wearable Ubiquitous Technol.
- **That's a Rap: Increasing Engagement with Rap Music Performance by Virtual Agents**
S. Olafsson, E. Kimani, R. Asadi, and T. W. Bickmore. 2017.
In International Conference on Intelligent Virtual Agents.
- **Real-Time Presentation Tracking Using Semantic Keyword Spotting.**
R. Asadi, H. J. Fell, T. W. Bickmore, and H. Trinh. 2016.
In INTERSPEECH.
- **Virtual Agents in the Classroom: Experience Fielding a Co-presenter Agent in University Courses**
T. Bickmore, H. Trinh, M. Hoppmann, and R. Asadi. 2016.
In International Conference on Intelligent Virtual Agents.
- **Improving the accuracy of speech emotion recognition using acoustic landmarks and Teager energy operator features**
Reza Asadi and Harriet J. Fell. 2015.
The Journal of the Acoustical Society of America.
- **Context-awareness in a persistent hospital companion agent**
T. Bickmore, R. Asadi, A. Ehyaei, H. J. Fell, L. Henault, S. Intille, L. Quintiliani, A. Shamekhi, H. Trinh, K. Waite, and C. Shanahan. 2015.
In International Conference on Intelligent Virtual Agents.

References will be furnished upon request