# Marzieh Razavi

## Education

Mar. 2013 - PhD, École Polytechnique Fédérale de Lausanne, Lausanne, Switzerland, Electrical

Present Engineering.

Supervised by Professor Hervé Bourlard and Dr. Mathew Magimai.-Doss

Sep. 2010 - M.Sc., Simon Fraser University, Vancouver, Canada, Computing Science.

Aug. 2012 Supervised by Professor Anoop Sarkar

Overall GPA: 3.6/4

Sep. 2005 - B.Sc., Sharif University of Technology, Tehran, Iran, Computer Engineering.

Sep. 2009 Overall GPA: 17.22/20

## Selected Professional Experience

Mar. 2013 - **Doctoral Researcher**, *Idiap Research Institute*, Martigny, Switzerland.

Present • Working mainly on acoustic data-driven grapheme-to-phoneme conversion, pronunciation lexicon development using automatically derived units, and under-resourced language speech recognition.

o Technologies: Python, HTK toolkit, Quicknet, Shell scripting.

Sep. 2010 – Research Assistant, Natural Language Lab - Simon Fraser University, Vancouver,

Dec. 2012 Canada.

Ensembling diverse clustering-based dependency parsers in MSTParser framework.

Applying domain-adaptation techniques to improve parsing of radiology reports.

o Technologies: Java, Python, Shell scripting.

Sep. 2010 - **Teaching Assistant**, Simon Fraser University, Vancouver, Canada.

Jun. 2012 • Computer architecture course.

Mar. 2009 - **R&D Engineer**, ASR Gooyesh Pardaz Ltd., Tehran, Iran.

Jan. 2010 • Designing a robust natural language understanding component for a flight information system.

Jul. 2008 - **R&D Intern**, ASR Gooyesh Pardaz Ltd., Tehran, Iran.

Sep. 2008 O Designing a robust parser for human-machine dialogue for banking systems.

### Selected Skills

Programming Java, Python, C++,R

Typesetting LATEX., Microsoft Word

languages Operating

Operating Linux, Mac OS, MS Windows

Systems

## Languages

Persian Native

English Full professional proficiency

French Elementary proficiency

Arabic Elementary proficiency

## Selected Publications

- Apr. 2016 Acoustic data-driven grapheme-to-phoneme conversion in the probabilistic lexical modeling framework, *Marzieh Razavi*; Ramya Rasipuram and Mathew Magimai.-Doss, in **Speech Communication**.
- Nov. 2015 Pronunciation Lexicon Development for Under-Resourced Languages Using Automatically Derived Subword Units: A Case Study on Scottish Gaelic, *Marzieh Razavi*; Ramya Rasipuram and Mathew Magimai.-Doss, winner of a Best Student Paper Award in Language and Technology Conference (LTC), Poznan, Poland.
- Apr. 2015 An HMM-Based Formalism for Automatic Subword Unit Derivation and Pronunciation Generation, *Marzieh Razavi* and Mathew Magimai.-Doss, in **IEEE ICASSP**, Brisbane, Australia.
- Apr. 2015 Integrated Pronunciation Learning for Automatic Speech Recognition Using Probabilistic Lexical Modeling, Ramya Rasipuram; *Marzieh Razavi* and Mathew Magimai.-Doss, in **IEEE ICASSP**, Brisbane, Asutralia.
- Sep. 2014 On Recognition of Non-Native Speech Using Probabilistic Lexical Model, *Marzieh Razavi* and Mathew Magimai.-Doss, in **INTERSPEECH**, Singapore city, Singapore.
- Apr. 2014 On Modeling Context-dependent Clustered States: Comparing HMM/GMM, Hybrid HMM/ANN And KL-HMM Approaches, *Marzieh Razavi*; Ramya Rasipuram and Mathew Magimai.-Doss, in **IEEE ICASSP**, Florence, Italy.
- Dec. 2013 Probabilistic Lexical Modeling and Unsupervised Training for Zero-Resourced ASR, Ramya Rasipuram; *Marzieh Razavi* and Mathew Magimai.-Doss, in **IEEE ASRU**, Olomouc, Czech Republic.
- Jun. 2011 An Ensemble Model that Combines Syntactic and Semantic Clustering for Discriminative Dependency Parsing, Gholamreza Haffari; *Marzieh Razavi* and Anoop Sarkar, in **ACL**, Portland, USA.

## Honors & Awards

- Nov. 2015 **Granted the best student paper award**, *Language and Technology Conference*, Poznan, Poland.
- Jun. 2014 Awarded the ISCA Student Travel Grant to attend INTERSPEECH 2014, International Speech communication Association (ISCA), Lausanne, Switzerland.
- Sep. 2011 Recipient of SFU graduate Fellowship, Simon Fraser University, Vancouver, Canada.
- Summer 2005 Ranked 258 $^{th}$ , Among more than 300000 students in the nationwide university entrance exam, Tehran, Iran.

#### **Activities**

Professional ISCA, IEEE and IEEE SPS student member. Activities

Extracurricular Poetry, Literature and Calligraphy. Activities