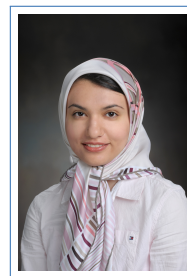# Marzieh Razavi

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Education

Mar. 2013 – August 2017	**PhD**, *École Polytechnique Fédérale de Lausanne*, Lausanne, Switzerland, Electrical Engineering. Supervised by Professor Hervé Bourlard and Dr. Mathew Magimai.-Doss
Sep. 2010 – Aug. 2012	**M.Sc.**, *Simon Fraser University*, Vancouver, Canada, *Computing Science*. Supervised by Professor Anoop Sarkar Overall GPA: 3.6/4
Sep. 2005 – Sep. 2009	**B.Sc.**, *Sharif University of Technology*, Tehran, Iran, *Computer Engineering*. Overall GPA: 17.22/20

Selected Professional Experience

Aug. 2017 – Present	**Post-doctoral Researcher**, *Idiap Research Institute*, Martigny, Switzerland. ○ Working on a sign language assessment project with the aim of developing an automatic sign language recognition and assessment system for Swiss German sign language learners. ○ Co-supervising a PhD student ○ Technologies: Python, HTK toolkit, Tensorflow, Keras.
Mar. 2013 – Jun. 2017	**Doctoral Researcher**, *Idiap Research Institute*, Martigny, Switzerland. ○ Worked on acoustic data-driven grapheme-to-phoneme conversion, pronunciation lexicon development using automatically derived units, and under-resourced language speech recognition. ○ Technologies: Python, HTK toolkit, Quicknet, Linux Shell scripting.
Sep. 2010 – Dec. 2012	**Research Assistant**, *Natural Language Lab - Simon Fraser University*, Vancouver, Canada. ○ Worked on ensembling diverse clustering-based dependency parsers in MSTParser framework. ○ Applied domain-adaptation techniques to improve parsing of radiology reports. ○ Technologies: Java, Python, Linux Shell scripting.
Sep. 2010 – Jun. 2012	**Teaching Assistant**, *Simon Fraser University*, Vancouver, Canada. ○ Computer architecture course.
Mar. 2009 – Jan. 2010	**R&D Engineer**, *ASR Gooyesh Pardaz Ltd.*, Tehran, Iran. ○ Designed a robust natural language understanding component for a flight information system.

Selected Skills

Programming languages	Java, Python, C++,R, SQL	Maching Learning & AI	Tensorflow, Keras
Operating Systems	Linux, Mac OS, MS Windows	Human Language Technologies	Quicknet, HTK, Kaldi

Languages

Persian	Native	English	Full professional proficiency
French	Elementary proficiency	Arabic	Elementary proficiency

Selected Publications

May 2018	SMILE Swiss German Sign Language Dataset, Sarah Ebling, Necati Cihan Camgoz, Penny Boyes Braem, Katja Tissi, Sandra Sidler-Miserez, Stephanie Stoll, Simon Hadfield, Tobias Haug, Richard Bowden, Sandrine Tornay, *Marzieh Razavi* and Mathew Magimai.-Doss, in **LREC**, Miyazaki, Japan.
Feb. 2018	Towards Weakly Supervised Acoustic Subword Unit Discovery and Lexicon Development using Hidden Markov Models, *Marzieh Razavi*; Ramya Rasipuram and Mathew Magimai.-Doss, in **Speech Communication**.
Feb. 2017	A Posterior-Based Multi-Stream Formulation for G2P Conversion, *Marzieh Razavi* and Mathew Magimai.-Doss, in **Signal Processing Letters**.
Sep. 2016	Improving Under-Resourced Language ASR through Latent Subword Unit Space Discovery, *Marzieh Razavi* and Mathew Magimai.-Doss, in **INTERSPEECH**, San Francisco, USA.
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.
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 258th**, *Among more than 300000 students in the nationwide university entrance exam*, Tehran, Iran.

Activities

Professional Activities	ISCA, IEEE and IEEE SPS student member.
Extracurricular Activities	Poetry, Literature and Calligraphy.