

CONTACT
INFORMATION

Malone Center for Engineering in Healthcare, Malone Hall,
Johns Hopkins University, Baltimore, MD.

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EDUCATION

- 2017–(expected)2022, Ph.D. Whiting School of Engineering, Johns Hopkins University, Baltimore, MD.
 - Major: **Electrical Engineering**
 - Supervisor: Dr. Archana Venkataraman
- 2011–2016, B.Sc. Sharif University of Technology. Tehran, Iran.
 - Major: **Electrical Engineering (Communications)**
 - Minor: **Mathematical Sciences**
 - Thesis Topic: *Fetal ECG Extraction Using Single-Channel Maternal Measurements*
 - Thesis Advisor: Dr. Mohammad Bagher Shamsollahi
- 2007–2011, Salam 1 Highschool. Tehran, Iran.
 - Major: Mathematics and Physics

PUBLICATIONS

- P. Tohidi, E. Bostan, P. Pad, and M. Unser, “MMSE Denoising of Sparse and non-Gaussian AR(1) Processes,” in *International Conference on Acoustics, Speech, and Signal Processing (ICASSP), 2016 IEEE*.

HONORS AND
AWARDS

- Ranked 82nd in the Nationwide Mathematics and Physics University Entrance Exam (among more than 280,000 participants in the country), Iran, July 2011.
- **Silver** Medalist of National *Physics Olympiad*, Tehran, Iran, August 2010.
- International Summer Research Program participant at the Life Sciences Department of École Polytechnique Fédérale de Lausanne at Biomedical Imaging Group under supervision of Prof. Michael Unser, Lausanne, Switzerland, July-August 2015

RESEARCH
EXPERIENCE

- Implementing a spline based MMSE interpolator for uniformly sampled AR(1) processes.
- Extraction of fetal ECG based on single channel maternal measurements.
- Generalizing and implementing two MMSE denoising methods developed for Lévy processes, to AR(1) processes.

RESEARCH
INTERESTS

- Statistical Signal Processing
- Biomedical Signal Processing
- Convex Optimization
- Statistics

COMPUTER SKILLS

- **Scientific Computation:** MATLAB, SciPy, Octave, R.
- **Programming Languages:** C/C++, Python.

LANGUAGES

- Farsi: Native
- English: Expert
- German: Beginner
- French: Beginner
- Arabic: Beginner

REFERENCES

Available Upon Request