

Zafar RAFII

Northwestern University, Electrical Engineering & Computer Science department
Ford Motor Company Engineering Design Center, Room 3.230
2133 Sheridan Road, Evanston, IL 60208, USA
+1 (773) 782-5153
zafarrafii@u.northwestern.edu
<http://www.cs.northwestern.edu/~zra446/>

EDUCATION

- 2008-2013** Ph.D. in Electrical Engineering & Computer Science (+ Certificate in Cognitive Science)
thesis: TBA
Northwestern University, Chicago/Evanston, IL, USA
- 2005-2006** Master of Science in Electrical Engineering
Illinois Institute of Technology, Chicago, IL, USA
- 2003-2006** Master of Electrical Engineering, Computer Science & Telecommunications
Ecole Nationale Supérieure d'Electronique et de ses Applications, Cergy, France
- 2001-2003** Classes Préparatoires aux Grandes Ecoles, Physics & Engineering Science
Jacques Decour, Paris, France
- 1998-2001** Baccalauréat in Sciences
Louis-le-Grand, Paris, France

EMPLOYMENT

- 2007-2008** Research Engineer
Audionamix (aka Mist Technologies), Paris Cyber-Village, France
- 2002-2004** Student Internship (3 months in total)
Dalkia, Paris-la-Defense, France

TEACHING

- 2012** *Machine Perception of Music & Audio*
2010 *Introduction to Electrical Engineering*

FELLOWSHIPS

- 2012** *Advanced Cognitive Science Fellowship*
2008 *Walter P. Murphy Fellowship*

REVIEWER

- 2012** *13th International Society for Music Information Retrieval*
2011 *Signal, Image and Video Processing*
12th International Society for Music Information Retrieval
IEEE Transactions on Audio, Speech and Language Processing
2010 *11th International Society for Music Information Retrieval*
IEEE Transactions on Audio, Speech and Language Processing
2009 *10th International Society for Music Information Retrieval*

PUBLICATIONS**Journal Articles**

- Andrew Todd Sabin, Zafar Rafii, and Bryan Pardo. "Weighting-Function-Based Rapid Mapping of Descriptors to Audio Processing Parameters," *Journal of the Audio Engineering Society*, Volume 59, Issue 6, pp. 419-430, June, 2011.

Conference Proceedings

- Antoine Liutkus, Zafar Rafii, Roland Badeau, Bryan Pardo, and Gaël Richard. "Adaptive Filtering for Music/Voice Separation Exploiting the Repeating Musical Structure," *37th International Conference on Acoustics, Speech and Signal Processing*, Kyoto, Japan, March 25-30, 2012.
- Zafar Rafii and Bryan Pardo. "A Simple Music/Voice Separation Method based on the Extraction of the Repeating Musical Structure," *36th International Conference on Acoustics, Speech and Signal Processing*, Prague, Czech Republic, May 22-27, 2011.
- Zafar Rafii and Bryan Pardo. "Degenerate Unmixing Estimation Technique using the Constant Q Transform," *36th International Conference on Acoustics, Speech and Signal Processing*, Prague, Czech Republic, May 22-27, 2011.
- Zafar Rafii and Bryan Pardo. "Learning to control a Reverberator using Subjective Perceptual Descriptors," *10th International Society for Music Information Retrieval*, Kobe, Japan, October 26-30, 2009.

Workshops

- Mark Cartwright, Zafar Rafii, Jinyu Han, and Bryan Pardo. "Making Searchable Melodies: Human vs. Machine," *3rd Human Computation Workshop*, San Francisco, CA, USA, August 8, 2011.
- Zafar Rafii, Raphael Blouet, and Antoine Liutkus. "Discriminant Approach within Non-negative Matrix Factorization for Musical Components Recognition," *DMRN+2: Digital Music Research Network One-day Workshop 2007*, Queen Mary, University of London, UK, December 18, 2007.

Technical Reports

- Zafar Rafii and Bryan Pardo. "A Digital Reverberator Controlled through Measures of the Reverberation," Northwestern University, EECS Department Technical Report NWU-EECS-09-08, 2009.

Tutorials & Seminars

- Josh McDermott, Bryan Pardo, and Zafar Rafii. "Leveraging Repetition to Parse the Auditory Scene," *13th International Society for Music Information Retrieval*, Porto, Portugal, October 8-12, 2012.
- Zafar Rafii. "A Simple Music/Voice Separation Method based on the Extraction of the Underlying Repeating Structure," Telecom ParisTech, Paris, France, July 29, 2011.

Patents

- Zafar Rafii and Bryan Pardo. "Acoustic Separation System and Method," Re: US Provisional Patent Application Serial No. 61/534,280.