Nicola Montecchio, Ph. D.

nicola.montecchio@gmail.com
http://www.nicolamontecchio.com

WORK EXPERIENCE

Music IR Scientist, The Echo Nest (now Spotify), Boston, MA, US   Jul 2012 - now
Research on classification and ranking algorithms for acoustic aspects of music (energy, valence, presence of vocals/acoustic instruments et al.), applied to a catalogue of circa 30 million recordings. Development of a large scale parametric acoustic similarity engine. Improvement of other aspects of the system using ad-hoc Bayesian graphical models.

Visiting Researcher, IRCAM, Paris, FR   Aug 2010 - Jun 2011
Research and development of real-time audio and gesture alignment algorithms. Involvement in the preparation of artistic productions. Supervisor: Dr. Arshia Cont.

EDUCATION

Ph.D., Information Engineering, Apr 2012   University of Padova, IT
Research topics: real-time alignment of music, gesture data; content-based identification of alternative versions of recordings. Attended with state-awarded scholarship. Advisor: Dr. Nicola Orio. List of publications and video demos available on the website.

M.S., Computer Science (Ingegneria Informatica), Jul 2008   Uni. Padova, IT
Graduated with highest marks; advisor: Dr. Nicola Orio.

Diploma, Piano performance, Feb 2005   Conservatory of Venice, IT
Graduated with highest marks. Teacher: M. Giorgio Agazzi. Winner of several competition awards (Ravenna, Pesaro, Padova, Venice). Performances as soloist with the Padova and Veneto orchestra. Advanced classes with internationally renowned musicians: D. Rivera, H. Shelley, F.-J. Thiollier, S. Perticaroli, L. De Barberiis, Trio di Parma.

SKILLS

Machine learning, probabilistic algorithms, information retrieval, signal processing.

Extensive programming experience in C/C++, Python, Java; to a lesser degree: Haskell, Matlab, R, Javascript. Github profile: https://github.com/nicolamontecchio

Languages: Italian (native), English (full proficiency), French (basic).
Italian nationality, U.S.A. permanent resident.