

Nicola Montecchio, Ph. D.

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

WORK EXPERIENCE

Music Information Retrieval Scientist, Spotify, New York, NY US Jul 2012 - now
(originally The Echo Nest, Boston, MA until Jun 2014)

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 (“covers”) 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. After graduation, winner of several competition awards, performances as soloist with orchestra, advanced classes with internationally renowned musicians.

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. Code samples: <https://github.com/nicolamontecchio>

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

New York, August 2014