

# Matthew Roddy

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citizenship: Ireland/USA  
[www.mattroddy.github.io](http://www.mattroddy.github.io)

SPECIALIST INTERESTS      Spoken dialogue systems, machine learning, multimodal interaction, speech technologies

DEGREES      **Trinity College**, Dublin, Ireland

*PhD in Electrical Engineering*

**Summer 2019**

- Research subject:      Applications of deep learning for modeling conversational turn-taking and user engagement with spoken dialogue systems
- Supervisor:              Dr. Naomi Harte

**Dublin City University**, Dublin, Ireland

*Master's Degree in Electronic Systems (MEng.)*

**March. 2016**

- Thesis title:              DSP-based Model Estimation and Control of a Loudspeaker for an Active Noise Control System

**University of Limerick**, Limerick, Ireland

*Master's Degree in Music Technology (MSc.)*

**Dec. 2013**

- Thesis title:              A Method of Morphing Spectral Envelopes of the Singing Voice for use with Backing Vocals

**Trinity College**, Dublin, Ireland

*Bachelor's Degree in Music (B.A)*

**Jun. 2010**

PUBLICATIONS      Roddy, M., Skantze, G., Harte, N. "Investigating Speech Features for Continuous Turn-Taking Prediction Using LSTMs", in *INTERSPEECH*, Hyderabad, India, September 2018.

Roddy, M. and Harte, N. "Conversational Gaze Aversion Detection Using Unsupervised Learning", in *European Signal Processing Conference (EUSIPCO)*, Kos, Greece, September 2017.

Roddy, M. and Harte, N. "Towards predicting dialog acts from previous speakers non-verbal cues", in *European Symposium on Multimodal Communication (MMSYM)*, Bielefeld, Germany October 2017.

Roddy, M. and Walker, J. "A method of morphing spectral envelopes of the singing voice for use with backing vocals", in *International Conference on Digital Audio Effects (DAFX)*, Erlangen, Germany, September 2014.

REVIEWER      Conference of the *Irish Sound, Science, and Technology Association (ISSTA15)*, Limerick, Ireland, August 2015.

RELEVANT EXPERIENCE      **Programmer/Developer**,      **Oct. 2013 - Sept 2014**

**Visilit, Event Production Startup** Dublin, Ireland

- Front-end developer (JavaScript, HTML, PHP, JQuery) for a web-based application aimed at professional stage productions.

PROGRAMMING LANGUAGES      **Main Languages:** Python, Matlab, C++.