Matthew Roddy | CV

Education

| Trinity College Dublin <i>PhD. in Electrical Engineering</i> | Dublin, Ireland 09/2015 – 01/2020 |
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| Dublin City University <i>MEng. in Electrical Engineering</i> | Dublin, Ireland 09/2014 – 08/2015 |
| University of Limerick MSc. in Music Technology | Limerick, Ireland 09/2012 – 08/2013 |
| Trinity College Dublin <i>BA. in Music</i> | Dublin, Ireland 09/2006 – 06/2010 |

Experience

| Cogito Machine Learning Scientist | Dublin, Ireland 06/2020 – Present |
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| Trinity College Dublin Post-Doctoral Research Fellow | Dublin, Ireland 02/2020 – 06/2020 |
| KTH University Visiting Researcher | Stockholm, Sweden 02/2018 – 03/2018 |
| Trinity College Dublin Teaching Assistant | Dublin, Ireland 09/2015 – 01/2020 |
| Visilit, Event Production Startup Freelance Web Developer | Dublin, Ireland 10/2013 – 09/2014 |

PhD Thesis

o **Matthew Roddy**, "Neural Turn-Taking Models for Spoken Dialogue Systems," *Trinity College Dublin*, 2021.

Refereed Conference Publications

- **Matthew Roddy**, Naomi Harte, "Neural Generation of Dialogue Response Timings," in *Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics (ACL)*, 2020.
- **Matthew Roddy**, Naomi Harte, "Predictive Turn-Taking Decisions with POMDPs," in *SigDial (Late-Breaking Results)*, 2019.
- o **Matthew Roddy**, Gabriel Skantze, Naomi Harte, "Investigating Speech Features for Continuous Turn-Taking Prediction Using LSTMs," in *Proceedings of Interspeech*, 2018.
- **Matthew Roddy**, Gabriel Skantze, Naomi Harte "Multimodal Continuous Turn-Taking Prediction Using Multiscale RNNs," in *Proceedings of International Conference on Multimodal Interaction (ICMI)*, 2018.

- Matthew Roddy, Naomi Harte, "Detecting Conversational Gaze Aversion Using Unsupervised Learning," in *Proceedings of European Signal Processing Conference (EUSIPCO)*, 2017.
- **Matthew Roddy**, Jacqueline Walker, "A Method of Morphing Spectral Envelopes of the Singing Voice for Use with Backing Vocals," in *Proceedings of International Conference on Digital Audio Effects (DAFx14)*, 2014.

Refereed Symposium Publications

o **Matthew Roddy**, Naomi Harte, "Towards predicting dialog acts from previous speakers non-verbal cues", in *Symposium on Multimodal Communication (MMSYM)*, 2017.

Reviewing

o ICASSP 2021, ICMI 2020

Invited Talks

o Machine Learning Meetup, Dublin, September 2018.

Languages and Technologies

Main Language: Python

Secondary Languages: C/C++, Matlab, LATEX, R, Bash

Technologies: PyTorch, Tensorflow, Kaldi, SciPy, NumPy, scikit-learn, NLTK, SpaCy, Linux,

Git, Slurm