Matthew Roddy | CV

☑ matthew.roddy@gmail.com
♥ mattroddy.github.io
♥ mattroddy
♥ matt_roddy

Experience

Cogito Corporation Senior Machine Learning Scientist

Machine Learning Scientist

Trinity College Dublin *Post-Doctoral Researcher*

KTH University *Visiting Researcher*

Trinity College Dublin *Teaching Assistant*

Visilit, Event Production Startup *Freelance Web Developer*

Education

Trinity College Dublin *PhD. in Electrical Engineering*

Dublin City University *MEng. in Electrical Engineering*

University of Limerick *MSc. in Music Technology*

Trinity College Dublin *BA. in Music* **Dublin, Ireland** 04/2022 – Present 06/2020 – 04/2022

Dublin, Ireland 02/2020 – 06/2020

Stockholm, Sweden 02/2018 – 03/2018

Dublin, Ireland 09/2015 – 01/2020

Dublin, Ireland 10/2013 – 09/2014

Dublin, Ireland 09/2015 – 01/2020

Dublin, Ireland 09/2014 – 08/2015

Limerick, Ireland 09/2012 – 08/2013

Dublin, Ireland 09/2006 – 06/2010

PhD Thesis....

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

Refereed Conference Publications

- Matthew Perez, Mimansa Jaiswal, Minxue Niu, Cristina Gorrostieta, Matthew Roddy, Kye Taylor, Reza Lotfian, John Kane and Emily Mower Provost, "Mind the gap: On the value of silence representations to lexical-based speech emotion recognition", in *Proceedings of Interspeech*, 2022.
- **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.

- 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

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

Services and Professional Activities

- Reviewing: ICASSP 2021-24, Interspeech 2022-23, ICMI 2020, CUI 2023
- **Organizing**: Organizing committee member for Interspeech 2023 (Dublin)
- Invited Talks:
 - Sigmedia Invited Talk, Trinity College Dublin, July 2022.
 - Machine Learning Meetup, Dublin, September 2018.
- Certifications:
 - AWS Certified Solutions Architect Associate (2023)
 - Generative AI with Large Language Models DeepLearning.AI (2023)

Languages and Technologies

Main Languages: Python, C++

Secondary Languages: Matlab, LATEX, R, Shell Scripting

Technologies: PyTorch, Tensorflow, Kaldi, SciPy, NumPy, Scikit-Learn, NLTK, SpaCy, Linux, AWS, Git