

Emilie d'Olne

809, Electrical Engineering, South Kensington, Imperial College London, SW7 2AZ, United Kingdom

✉ emilie.dolne16@imperial.ac.uk | 📄 github.com/ed1016 | 🌐 www.linkedin.com/in/emiliedolne | 📧 Emilie d'Olne

Education

Imperial College London

London, UK

PhD – Speech and Audio Processing

2020 - Present

- Interests in binaural beamforming, dereverberation, speech enhancement, wearable microphone arrays, distributed microphone networks, machine learning, deep learning.
- *SMarTTER HeAR* project in collaboration with University College London on hearing in dementia.

MEng – Electrical and Electronic Engineering

2016 - 2020

- Graduated with First Class Honours.
- Final year project: “Automatic detection of Alzheimer’s Disease using speech”.

Athénée Royal Charles Rogier Liège 1

Liège, Belgium

Certificat d’Enseignement Secondaire Supérieur

2010 - 2016

Experience

Imperial College London

London, UK

Research Assistant

Summer 2023

- Collaborated with Meta Reality Labs on multimedia data collection for AR/VR applications.

Research Intern

Summer 2019

- Worked on gaze-directed beamforming for hearing aids in collaboration with Cardiff University.

Teaching Assistant

2019 – Present

- Teaching, development of materials, assessment, and support.

Nuance Communications (Microsoft)

London, UK

Research Scientist Intern

Summer 2022

- Investigated the impact of data augmentation for automatic speech recognition (ASR) in accented speech.

Volunteering

IEEE Student Branch, Imperial College London

London, UK

Vice-Chair, Treasurer

2021 – Present

- Organising technical seminars and workshops, monitoring the branch’s finances.

Communications and Signal Processing Research Group, Imperial College London

London, UK

Postgraduate Student Representative

2021 – 2023

- Represented students’ interests within the department and at the university.

Publications

JOURNAL PUBLICATIONS

2023 **E. d’Olne**, A. H. Moore, P. A. Naylor, J. Donley, V. Tourbabin and T. Lunner, “Group conversations in Noisy environments (GiN) – Multimedia recordings for location-aware speech enhancement”, in *IEEE Open Journal of Signal Processing*, 2023.

CONFERENCE PROCEEDINGS

2022 **E. d’Olne**, V. W. Neo, and P. A. Naylor, “Speech Enhancement in Distributed Microphone Arrays Using Polynomial Eigenvalue Decomposition”, in *Proc. Eur. Signal Process. Conf. (EUSIPCO)*, Belgrade, Serbia, 2022.

2022 **E. d’Olne**, V. W. Neo, and P. A. Naylor, “Frame-based space-time covariance matrix estimation for polynomial eigenvalue decomposition-based speech enhancement”, in *Proc. Int. Workshop on Acoust. Signal Enhancement (IWAENC)*, Bamberg, Germany, 2022.

2022 **E. d’Olne**, A. H. Moore, and P. A. Naylor, “Model-based beamforming for wearable microphone arrays”, in *Proc. Eur. Signal Process. Conf. (EUSIPCO)*, Dublin, Ireland, 2021.

Awards

2020

Institute of Engineering and Technology (IET) Prize Imperial College London, EEE Department

London, UK

2018, 2019, 2020

Dean’s List for Academic Excellence Imperial College London, EEE Department

London, UK

Skills

Technical Languages MATLAB, Python, Bash, TensorFlow, C++, GitHub, Linux, HTML/CSS
French (bilingual), Spanish (intermediate), German (intermediate)