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   MATLAB, Python, Bash, TensorFlow, C++, GitHub, Linux, HTML/CSS

Languages   French (bilingual), Spanish (intermediate), German (intermediate)