

DOMINIKA WOSZCZYK

@ dcw19@ic.ac.uk

+44 7763637322

in [linkedin.com/in/dominika-woszczyk](https://www.linkedin.com/in/dominika-woszczyk) github.com/domiwk

<https://www.dominikawoszczyk.com>

EDUCATION

PhD in Computing

Imperial College London

2019- present London, UK

- Topic: Security & voice services.
- Supervisor: Soteris Demetriou.
- Lab : **AP**lications and **S**ystems **S**ecurity.

MSc. Artificial Intelligence

University of Southampton

2018-2019 Southampton, UK

- Distinction
- Thesis: Robust Speech Recognition for Dysarthric Speech and Accented Speech. Published at Interspeech 2020.
- Modules include Deep Learning, Evolution of Complexity, Biometrics, Advanced Machine Learning, and Intelligent Agents.

BSc. Knowledge Engineering and Data Science

Maastricht University

2015-2018 Maastricht, The Netherlands

- 7.74
- Thesis: MaaSim, a Liveability Simulation For Improving The Quality Of Life In Cities. Published at SoGood2018, ECMLPKDD.
- Modules include Machine Learning, Robotics, Bioinformatics, Data Structures, Graph Theory, Linear Programming, Probability and Statistics.

WORK EXPERIENCE

Applied Scientist Intern, Amazon

October 2021 – April 2022 Cambridge, UK

- Joined the Alexa-TTS group and worked on non-parallel style transfer during voice conversion. The work resulted in a paper at a satellite workshop of Interspeech 23', [Clarity Workshop 23'](#).

Teaching Assistant, Imperial College London

2020 – 2022 London, UK

- Advanced Security course (Autumn Term).
- Natural Language Processing course (Spring Terms).
- Introduction to Machine Learning course (Autumn Term).

Student Consultants, KKFE, University of Southampton

2019 Southampton, UK

- Part of the Business Innovation Program, a 6 weeks team project providing consultancy to a non-profit organization.

Data Scientist, PCKwadaat (VissQ), Maastricht University

2016-2018 Maastricht, The Netherlands

- Two years Honours program "Ke@Work", worked in the innovation team on council data to create statistical models using machine learning.

AWARDS

Best Poster Award

06.2022 Imperial College London, UK

Winner of the Late Stage Review poster competition and recipient of a total of 200 pounds.

WiML @ ICML 2021 Travel Grant

2021 Women In Machine Learning

Recipient of travel and conference fees grant.

Engineering in Business Fund recipient 2019

08.2019 Royal Academy of Engineering

- Recipient of a total of 1000 pounds.

Future world's Dragon's Den 2019

11.05.2019 University of Southampton

- Pitched at the University of Southampton's Dragon's Den Event.
- Received training from varied business mentors and experts.

BrightSCIdeas Challenge Final 2019

19.03.2019 Society of Chemical Industry, UK

- Finalists at the national science-based innovations pitch competition with an AI chatbot to help with mental health.

Honours+ program

2016-2017 Maastricht University, NL

- Program for students at the top of their studies.
- Interdisciplinary project: 'Social Assistive Robots'.
- Attended workshops for creative thinking and strength finding.

SKILLS

- **Languages:** Polish (mother tongue), French (mother tongue), English (fluent), Italian (intermediate), German (beginner).
- **Programming Languages:** Python, Java, R, Matlab, C, Prolog, PostgreSQL, html, css.

PERSONAL PROJECT

Chatbot for language learning

- Building a speech recognition system robust to one's accent as well as a grammar corrector, entity classifier, and dialogue management system.

VOLUNTEERING

PhD Representative

Imperial College London

📅 2020 – Present

📍 London, UK

In charge of reporting to Departmental meetings about student matters and co-organizing and/or hosting PhD activities and [ICC bi-annual conferences](#).

Founder of Speech & Audio Reading Group

Imperial College London

📅 2020 – Present

📍 London, UK

Founder of the speech processing reading group at ICL.

President of Women and Non-binary Individuals in Computing

Imperial College London

📅 2021 – 2023

📍 London, UK

Co-organized and/or led student and research panels, industry talks at Imperial, mental-health workshops, and GirlsWhoML series of workshops to introduce non-computer science students to Machine Learning. WNBIC website: <http://wic.doc.ic.ac.uk>.

Volunteer at>HelloWorld Hack 2023

Imperial College London

📅 June 2023

📍 London, UK

[HelloWorld Hack](#) is a full day of coding activities for school girls aged 7-11 to engage them with computer science and inspire them to pursue STEM careers. I helped with coding activities in Scratch where the girls had to team up and build a game.

Volunteer at WiML @ ICML 2021

Virtual ICML 2021

📅 2021

📍 London, UK

Helping around at the sponsor's booths.

PUBLICATIONS

👥 Conference Proceedings

- Woszczyk, Dominika, Manuel Sam Ribeiro, et al. (2023). "Voice Conversion for Lombard Speaking Style with Implicit Acoustic Feature Conditioning." In: *Clarity Workshop 2023*.
- Woszczyk, Dominika, Anna Hedlikova, et al. (2022). "Data Augmentation for Dementia Detection in Spoken Language." In: *Proc. Interspeech 2022*, pp. 2858–2862. DOI: [10.21437/Interspeech.2022-10210](https://doi.org/10.21437/Interspeech.2022-10210).
- Khan, Sojhal Ismail et al. (2021). "Characterizing Improper Input Validation Vulnerabilities of Mobile Crowdsourcing Services". In: *Annual Computer Security Applications Conference*, pp. 944–956. DOI: [10.1145/3485832.3485888](https://doi.org/10.1145/3485832.3485888).
- Woszczyk, Dominika, Alvin Lee, and Soteris Demetriou (2021). "Open, Sesame! Introducing Access Control to Voice Services". In: *Proceedings of the 1st Workshop on Security and Privacy for Mobile AI*, pp. 7–12. DOI: [10.1145/3469261.3469405](https://doi.org/10.1145/3469261.3469405).
- Woszczyk, Dominika, Stavros Petridis, and David Millard (2020). "Domain Adversarial Neural Networks for Dysarthric Speech Recognition". In: *Proc. Interspeech 2020*, pp. 3875–3879. DOI: [10.21437/Interspeech.2020-2845](https://doi.org/10.21437/Interspeech.2020-2845).
- Woszczyk, Dominika and Gerasimos Spanakis (2018). "MaaSim: A Liveability Simulation for Improving the Quality of Life in Cities". In: *Joint European Conference on Machine Learning and Knowledge Discovery in Databases*. Springer, pp. 118–133. DOI: [10.1007/978-3-030-13453-2_10](https://doi.org/10.1007/978-3-030-13453-2_10).

SUPERVISION

MSc students

- Alban Tavalacci (2023).
- Anna Hlédiková (2021).
- Daria Galkina (2021).
- Alvin Lee (2019-2020).

Undergraduate students

- Jessica Wu, visiting UROP student from MIT. (2022)

OTHER PROJECTS

Speech & Audio Reading Group

Sea Skipper License

- Passed the Sea Skipper License, after collecting 200 hours as crew on the sea and passing the theoretical and practical exam.

TALKS

Invited Speaker @ Clarity Workshop 23', Interspeech 2023

📅 August 2023

📍 Dublin, IE

Gave a talk about the Lombard effect and Intelligibility applications for TTS.

Impostor Syndrome Workshop

📅 July 2023

📍 London, UK

Gave a workshop on Impostor syndrome and coping strategies to consultants from [Bear-ingPoint](#).

9th Doctoral Consortium @ Interspeech 2023

📅 August 2023

📍 Dublin, IE

My abstract was selected to present my PhD thesis and progress to a panel of PhD students and experts.

Talk @ Machine Learning and Cyber Security Symposium @ ICL

📅 June 2022

📍 London, UK

Gave a talk on "Secrets your Voice reveals" at the [symposium](#) on privacy leakage in speech.

3rd Seminar for Computer Science Researchers

📅 June 2022

📍 Warsaw, PL

Presented my research at a research panel held at the [Perspektywy Women in Tech Summit 2022](#).

Alumni Showcase @ ICL

📅 June 2022

📍 London, UK

Presented my research on Privacy-Preserving Speech Processing to Imperial Alumni and future students.

Speech and Privacy Workshop @ Women at Imperial Week

📅 March 2021

📍 London, UK

Ran a workshop on speech processing and building an emotion classifier from speech signals, as well as how we can perform obfuscation and fool the classifier.