# **DORIEN HERREMANS**

## **ASSISTANT PROFESSOR**





linkedin.com/in/ dorien-herremans

dorienherremans.com

Female, LGBTQ+

## SKILLS

Al Strategy

Al & Machine Learning

Thought leadership

Audio and Music Technologies

Grant writing & management

Innovation Management

Blockchain & FinTech

Leadership

Strategy / governance

Teaching and public speaking

## EDUCATION

POSTDOC Machine learning for music Queen Mary University of London, UK 2017

PHD, APPLIED ECONOMICS University of Antwerp 2014

MSc, BUSINESS ENGINEER
—MANAGEMENT
INFORMATION SYSTEMS
University of Antwerp
2000-2005

#### SUMMARY

Expert in AI technologies for novel applications such as Audio and FinTech. As a thought leader in the field, I was nominated on the Singapore 100 Women in Technology list 2021. In addition my focus on technology, I am empowered by my economic background to better tackle leadership positions. I am passionate about strategic thinking and have a diploma in Corporate Governance. Being an avid learner, I like to deconstruct novel technologies to better understand how they can serve strategic goals. I have ample experience acquiring and managing multi-million budgets, publishing in top journals/conferences, and leading multiple project teams. I have given invited talks about my work around the world. Cryptocurrency technologies and trading signals are my passion. My detailed academic CV can be found at dorienherremans.com

#### PROFESSIONAL EXPERIENCE

## ASSISTANT PROFESSOR (AI)

2017 - current

Director SUTD Game Lab (independent research centres within SUTD)
Singapore University of Technology and Design, Singapore, co-Founded by MIT

I <u>founded and lead multiple labs</u>: AMAAI (Audio, Music, and AI lab) as well as the AIFi (AI for Finance) lab. Some key achievements:

- Attracted and managed over 6 million SGD in funding (~4.4 million USD) in funding, ~4.7 million as lead PI, and 2.5 million as co-PI.
- · Manage on average around 20 staff
- Courses taught: <u>Data Science</u>, <u>AI</u>, and <u>Applied Deep Learning</u>, and <u>Big</u> databases.
- Published in top journals and computer science conferences.
- 4 PhD students successfully defended under my supervision, currently advising 7 students.
- · Advising in 11 PhD student committees; final jury member of 8 PhDs.
- <u>Invited speaker</u> at numerous international conferences.
- Monthly <u>presentations to senior leadership</u>, on progress leading the cyber physical campus initiative.

## ADVISORY BOARD CHAIR

2022 - current

Sounders Music, The Netherlands

An innovative company in the entertainment industry which provides unique data insights together with objective research for emerging talent.

#### ACADEMIC BOARD MEMBER

2020 - current

Al Business School, Zürich, Switzerland

Contribute to <u>shaping the future</u> of the AI Business school by helping develop the curriculum, keeping track of learning activities, and helping expand the faculty.

#### ADVISORY BOARD MEMBER

2020 - current

International Artificial Intelligence and Quantum Technology (AIQT) Foundation, Davos, Switzerland

## **DORIEN HERREMANS**

## LANGUAGE SKILLS

English - near native

Dutch - native

French - excellent

German - good

Spanish - fair

## ACHIEVEMENTS

MARIE-CURIE FELLOWSHIP European Research Council 2015

## SG100 WOMEN IN TECH 2021 Award

SENIOR MEMBER
Institute of Electrical and
Electronics Engineers
(IEEE)
2017

KEYNOTES AND TALKS Gave over 60 invited talks and seminars around the globe

#### **EXTERNAL PRESS**

For podcasts - video interviews - articles in the popular press:

dorienherremans.com/press

#### PROFESSIONAL EXPERIENCE continued

RESEARCH SCIENTIST (JOINT APPOINTMENT 25%) 2017 - 2020 Institute of High Performance Computing, A\*STAR, Singapore

 Published and led project on gamifying Al Music technology for healthcare as well as audio transcription software.

## CERTIFIED DEEP LEARNING INSTRUCTOR

2017 - 2019

**NVIDIA** Deep Learning Institute

· Led workshops on cutting-edge deep learning technology.

## MARIE-CURIE FELLOW

2015 - 2017

Queen Mary University of London, UK

- Obtained funding for this position through grant writing.
- · Published top research.
- · Gave over 10 invited talks on 3 continents during these 2 years.

## **MANDAATASSISTANT**

2010 - 2015

University of Antwerp, Belgium

Department of Engineering Management, Faculty of Applied Economics

- · Elected faculty council member.
- Faculty member during my PhD (50% research, 50% teaching).
- Co-taught the following graduate-level courses:
  - Technological Project Management, Supply Chain Management, Seminar Applied Mathematics (Matlab), Operations Management, Total Quality Management, Final Project Business Engineering.

## VISITING RESEARCHER

April - June 2014

Universidad del País Vasco UPV/EHU, San Sebastián, Spain Department of Computer Science and Artificial Intelligence

- · Organised project management networking event.
- · Developed AI music generation system .

## WEBMASTER

2009 - 2010

Vanbreda International, Antwerp, Belgium

- Initiated move to Drupal platform, connected company with Dries Buytaert (founder of Drupal project)
- · Maintained around 170 B2B microsites for corporate clients.

#### OWNER/FOUNDER

2006 - 2009

Holistic Vibes Sàrl, Sierre, Switzerland

- Sold over 4,000 copies of book I authored.
- · Consulted on, and developed Drupal websites.

## **DORIEN HERREMANS**

#### REFERENCES

DR. SIMON LUI Director Tencent Music nomislui@gmail.com

PROF. ELAINE CHEW Full Professor IRCAM eniale@gmail.com

PROF. KENNETH SORENSEN Full Professor University of Antwerp ksrnsn@gmail.com

#### PROFESSIONAL EXPERIENCE continued

IT LECTURER 2006 - 2008

Les Roches, International School of Hotel Management, Montana, Switzerland

- Taught in MBA program (3D Computer Animation Computer Apps).
- Ranked among the top 3 hospitality management schools in the world

## PROFESSIONAL CERTIFICATES

CORPORATE GOVERNANCE (Diploma) Corporate Governance Institute - Glasgow Caledonian University	2021
FINTECH (3 courses, incl. FinTech Ethics, Blockchain,) University of Hong Kong	2021
AI STRATEGY (1 course) University of Berkeley	2020
FUNDAMENTALS OF TECHNICAL ANALYSIS (2 courses) New York Institute of Finance	2021

#### SELECTED PUBLICATIONS

Authored <u>over 100 top-tier scientific peer-reviewed publications</u>. Full list available at dorienherremans.com/biblio

- D. Herremans. 2021. aiSTROM A roadmap for developing a successful AI strategy. IEEE Access.
- Cheuk K.W., Anderson H., Agres K., Herremans D.. 2020. nnAudio: An on-the-fly GPU Audio to Spectrogram Conversion Toolbox Using 1D Convolution Neural Networks. IEEE Access
- Herremans D., Chuan C.-H., Chew E.. 2017. A Functional Taxonomy of Music Generation Systems. ACM Computing Surveys. 50(5):30.
- Thao, H. T. P., Roig, G., & Herremans, D. (2023). EmoMV: Affective music-video correspondence learning datasets for classification and retrieval. Information Fusion, 91, 64-79.
- Lee-Leon A., Yuen C., Herremans D.. 2021. Underwater Acoustic Communication Receiver Using Deep Belief Network. IEEE Transactions on Communications.:1-1.
- J. Ong, D. Herremans. 2023. Deep Multi-Task Learning for Time Series Momentum Portfolio.
- Herremans D., Martens D, Sörensen K.. 2014. Dance hit song prediction. Journal of New music Research. 43:302.
- Herremans D.. 2010. Drupal 6: Ultimate Community Site Guide. [book]

## APPOINTMENTS & COMMITTEE MEMBERSHIP

- Expert evaluator for engineering panel for the evaluation of the 2019
   Marie Skłodowska-Curie Action "Innovative Training Networks"
- · Scientific Advisory Committee for Al.SG, Al Governance pillar
- Principle Risk Committees (cybersecurity & digital education), SUTD
- Faculty Selection Committee Member (Al faculty pos.) University of Oslo
- · Guest editor:
  - Neural Computing and Applications (top tier journal)
  - Proc. In Machine Learning Research (PMPR)
- · Reviewer for over 10 top multidisciplinary journals
- · Program committee member of over 10 top conferences
- Organising committee of 3 top conferences (ICASSP, NeurIPS HEAR Challenge)