Hidde Fokkema

Curriculum Vitae

CONTACT DETAILS

Science Park 107, Amsterdam Address

F3.27 Office

Postbus 94248, 1090 GE Amsterdam Postal

h.j.fokkema@uva.nl E - mail

EDUCATION

PhD

University of Amsterdam

 ${\bf Mathematical\ Machine\ learning},\ Formalising\ Explainable\ AI.$

Supervisor: dr. Tim van Erven

2019/09-2021/08 MSc. Mathematics

University of Amsterdam

Masters degree Mathematics. GPA: 8.9. (Cum Laude)

Title thesis: Martingale optimal transport: properties and computational methods.

Supervision: prof. dr. Peter Spreij, dr. Sonja Cox.

2015/09-2019/08 **BSc.** Mathematics

University of Amsterdam

Bachelor degree Mathematics with a minor in Artificial Intelligence, GPA: 8.1.

Title thesis: Learning and thermodynamics. Supervision: dr. Bas Kleijn, dr. Greg Stephens.

BSc. Physics and Astronomy

University of Amsterdam

Bachelor degree Physics and Astronomy, GPA: 8.1.

Title thesis: Learning and thermodynamics Supervision: dr. Bas Kleijn, dr. Greg Stephens.

WORK EXPERIENCE

Junior quantitative consultant

2018/03-2021/06

Amsterdam Data Collective (ADC)

ADC is a quantitative management consultancy firm using cutting edge data analysis to offer their clients useful insights into their data and help them make more data-driven decisions.

Teaching assistent

Assistent Teacher

2018/05-2018/07

University of Amsterdam

Stichting Studiebegeleiding Leiden

International volunteer

2014/09-2019/03

European Youth Parliament

The European youth Parliament is an international network active in over 40 countries in Europe. Its goal is to provide young people an interactive educational platform. The events that are organised offer participants the opportunity to express their opinions and ideas about a wide range of topics.

PUBLICATIONS

Published

- H. Fokkema, R. de Heide, T. van Erven, Attribution-based Explanations that Provide Recourse Cannot be Robust, *Journal of Machine Learning Research*, vol. 24, no. 360, pp. 1-37, 2023.
- H. Fokkema, D. Garreau, T. van Erven, The Risks of Recourse in Binary Classification, International Conference on AI & Statistics, To appear, 2024.

TALKS

- Stochastics Seminar KdVi, A new Algorithm for Convex Bandit Optimization, March 2024
- Ministry of Justice and Security, Some Theoretical Limitations of Explainability Methods, March 2024
- Saarland University Workshop on Interpretability and Recourse, The Risks of Recourse in Binary Classification, October 2023;
- Amsterdam Business School, The Risks of Recourse in Binary Classification, September 2023;
- Xomnia Data Seminar, Some Theoretical Limitations of Explainability Methods, September 2023;
- 1st Nice workshop on Interpretability, Attribution-based Explanations that Provide Recourse Cannot be Robust, November 2022;
- Statistics Seminar KdVi, Attribution-based Explanations that Provide Recourse Cannot be Robust, November 2022;
- CWI Machine Learning Seminar, Attribution-based Explanations that Provide Recourse Cannot be Robust, July 2022;
- 1st Workshop Mathematics & Artificial Intelligence, CWI, poster presentation, June 2022;
- CWI Machine Learning Seminar, Optimal Transport and its Applications, January 2022;

SKILLS

Languages Dutch (native)

Engels (fluent) German (basic) French (basic)

Software Python, LATEX, Mathematica, TypeScript, D3.js, SQL, Matlab,

R, HTML

HOBBIES

Music Guitar (acoustic/electric)

Piano

(Modular) synthesizer

Sport Hockey, Fitness