# Gabriel Bénédict

### gabriben.github.io

# Research Interests

in Contact gbndict@gmail.com

 $+34\ 673\ 069\ 244$  $+41\ 79\ 411\ 92\ 06$  A mix of theoretical and applied AI research. The main themes are optimization for neural networks (surrogate metrics as losses), (normative) diversity metrics for news recommendation, intent-satisfaction modelling, video-to-music AI and now diffusion. [Google Scholar 🗲]

### Experience Date of birth

Dec. 23. – Present

31.10.1993

Amazon Machine Learning Scientist, GenAI Madrid, ES

Citizenship

Generative AI for Amazon devices. LLMs (<8B) on the edge: custom losses for LLMs, LLMs for touch screens, device using agents.

(i) Started and co-lead MusicFlow: a webapp for AI music recommenda-

tions for videos (music similarity, music labelling, video-to-music tasks). Hired 6 FTEs. (ii) Implementation @Videoland (SVOD) and @RTL-

Nieuws: still-picking, survey design and diversity in news recommenda-

tion metrics (iii) We started Data-Academy – data-driven decisions across

Swiss, French, Brazilian

Oct. 20 - Nov.23 RTL NL Artificial Intelligence Researcher Amsterdam, NL

Languages

Good knowledge of Dutch, Hebrew

Hamburg, GE / Amsterdam, NL / Lyon, FR Oct. 19 - Oct.20 Bertelsmann Data Scientist at Gruner & Jahr and Bedrock

> (i) Personalisation roadmap. (ii) News articles quality survey and scoring in production. (iii) Causal Inference with Bayesian structural time series models to assess impact of recommendation system.

# co-organization

Generative Information

Generative Information

Aug. – Sep. 19 Cambridge University

Deep Learning Researcher

RTL.

Cambridge, UK

Self-supervised learning with autoencoders for genomics on UK BioBank

Jul. – Sep. 18 Cytel

14 - 18

Barcelona, ES

LEUVEN, BE

Zurich, CH

Zurich, CH

Zurich, CH

LEUVEN, BE

NEW YORK, US

ST GALLEN, CH

ST GALLEN, CH

Sao Paulo, BR

Statistician

Research and R-package development for adaptive non-parametric survival clinical trials

@Recsys22,

@Naver/AMLab/ ADS/FoMo

Education

Oct. 20 - Nov.23 University of Amsterdam Amsterdam, NL

2018 - 2019

PhD candidate in AI for personalization

Risk Management at Spinnaker Capital

Internships and Short Term Research

Master Thesis Statistical Assistant at KUL

Category Management Intern at Danone

Internal Audit at Adecco Group

Structural Equation Modelling to model fear of terrorism

Research Assistant at Institute of Political Science

Controlling and Finance Intern at Aeris Capital

KU Leuven & Columbia University

Master in Statistics (1st & 2nd year respectively)

Magna Cum Laude

Thesis Digitizing and Reconstructing Kaplan Meier Survival Data – The survThief package

2012 - 2016

Bachelor in Economics Thesis Debt Relief Efficiency

Universität St Gallen [HSG]

### **Publications**

SIM: Surface-based fMRI Analysis for Inter-Subject Multimodal Decoding from Movie-Watching Experiments. Gabriel Bénédict, Simon Dahan, Logan Z. J. Williams, Yourong Guo, Daniel Rueckertt, Robert Leech, Emma C. Robinson @ICLR 🗷

2023 RecFusion: A Binomial Diffusion Process for 1D Data for Recommendation Gahriel Bénédict Olivier Jeunen Samuele Pana Samarth Bhargav, Daan Odijk, Maarten de Rijke. @GenRec-CIKM

2022 sigmoidF1: A Smooth F1 Score Surrogate Loss for Multilabel Classification. Gabriel Bénédict, Hendrick Vincent Koops, Daan Odijk, Maarten de Rijke. @TMLR

2022 Intent-Satisfaction Modeling: From Music to Video Streaming. Gabriel Bénédict, Daan Odijk, Maarten de Rijke. @TORS 🖻

2022 RADio-Rank-Aware Divergence Metrics to Measure Normative Diversity in News Recommendations Gabriel Bénédict, Sanne Vrijenhoek, Mateo Gutierrez Granada, Daan Odijk, Maarten de Rijke. @Recsys 🖾

The University of Amsterdam at the TREC 2021 Fair Ranking Track. 2021 Ali Vardasbi, Gabriel Bénédict, Shashank Gupta, Maria Heuss, Pooya Khandel, Ming Li, Fatemeh Sarvi. @TREC

Native in French

Fluent in English, German, Portuguese & Swiss German

Workshop

Retrieval @SIGIR 23

Retrieval @SIGIR 24

# Reviewing

NeurIPS 23, AABI 23, AISTATS 21 & 22, MLRC 22

### Awards

Best Paper Runner up MVP 22 @IRLab

### Talks

GenIR @ZetaAlpha [recording]

GenIR & RecFusion

## Sports

Ski-touring, bouldering, tennis, rugby

### Extracurricular

Robust Statistics lecturer at Yeshiva University NY Statistical Consultant for LionbaseCo-president of Club de Lecture HSG Co-founder at Mia