


BAS MAAT

Data Scientist ~ Software Engineer

 basmaat.com

 bjmaat@gmail.com

 +31 (6) 2133 5749

 github.com/revess



The Hague, The Netherlands

SUMMARY

I am a data scientist and software engineer specializing in generative AI, with experience in research, teaching, and audio. I am proficient in Python, JavaScript, and machine learning technologies.

SKILLS

Languages: Python, JavaScript, Node.js, C++, R

Technologies: Torch, TensorFlow, WanDB, GCP, Docker, MongoDB.

PROJECTS

Generative AI
2023 - present

MIDIGPT

Developed MIDIGPT, an innovative music generation algorithm using MIDI and Transformer models, in collaboration with Researcher Peter Bloem. This algorithm focuses on improving the expressivity and generation of Non-Western music.

Generative AI
2023

Disco GAN

Collaborated with SETUP to create a generative AI capable of generating images from a limited dataset of a small discotheque in the Netherlands. The project aimed to assess the AI model's ability to capture the unique atmosphere of the venue.

[setup.nl](#)

Generative AI
2020

SETUP Smartlappen

Worked with SETUP to develop a system enabling users to experience writing Dutch "Smartlappen" (a type of song) with the assistance of GPT-2. This AI was initially created for SETUP's project "Tranen Op De Dansvloer" and later adapted for their "Jij & AI" workshop.

[smartlappen.ai](#)

EXPERIENCE

2022 – present
The Netherlands

Administration

Maintains customer support for MediaOcean's media advertising invoicing database.

Media Ocean

2023 – 2023
The Netherlands

Research Assistant

Actively contributed to a project training Transformer models on MIDI data to develop a culturally independent model.

VU Amsterdam - Network Institute

Torch / Python / MIDI / WanDB

2019 – 2020
The Netherlands

Teacher Assistant

- Led workgroups at VU Amsterdam on Deep Learning, Natural Language Processing, Machine Learning, Security and Machine Learning, and Machine Learning for the Quantified Self.
- Conducted workgroups at HKU on Python, C++, and JavaScript.
- Delivered guest lectures at the Conservatorium of Amsterdam on effectively utilizing audio technology in the classroom.

VU Amsterdam, HKU and Conservatorium of Amsterdam

Teaching / Python / Torch

2019 – 2020
Barcelona, Spain

Intern

Completed an internship at the Music and Machine Learning Lab at University Pompeu Fabra, focusing on Music Information Retrieval and polyphonic audio transcription using MLP, utilizing Scikit-Learn, Python, and audio analysis techniques.

Music and Technology Group

Scikit-Learn / Python / Audio Analysis

EDUCATION

09/2022 - 07/2024 **Master of Science - Artificial Intelligence**
Study on Artificial Intelligence.

VU Amsterdam

09/2017 - 07/2021 **Bachelor Of Arts**
Music and Technology

Bachelor study in Music and Technology. A combination of both, audio technology and programming with audio, C++, C, JavaScript and Python, and composition/music production.

University of Art Utrecht

LANGUAGES


Dutch - native, **English** - C1, **Portuguese** - B1

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Den Haag, Nederland



/in/bas-m-35b479132

SUMMARY

Ik ben een data scientist en software-engineer gespecialiseerd in generatieve AI, met ervaring in onderzoek, onderwijs en audio. Ik ben ervaren in Python, JavaScript en machine learning.

SKILLS

Languages: Python, JavaScript, Node.js, C++, R

Technologies: Torch, TensorFlow, WanDB, GCP, Docker, MongoDB.

PROJECTS

Generative AI
2023 - present

MIDIGPT

Ontwikkeld in samenwerking met onderzoeker Peter Bloem MIDIGPT, een baanbrekend algoritme voor muziekgeneratie. Door gebruik te maken van MIDI-data en Transformer-modellen, richt MIDIGPT zich specifiek op het verbeteren van de expressiviteit en het genereren van niet-westerse muziek.

Generative AI
2023

Disco GAN

setup.nl

Samenwerking met SETUP: Ontwikkeling van een generatieve AI voor beeldgeneratie uit beperkte dataset van kleine discotheek (Nederland) om de sfeer van de locatie vast te leggen.

Generative AI
2020

SETUP Smartlappen

smartlappen.ai

Samenwerking met SETUP: Ontwikkeling van een GPT-2 aangedreven systeem voor het schrijven van Nederlandse smartlappen (projecten "Tranen Op De Dansvloer" en "Jij & AI").

EXPERIENCE

2022 – present
Nederland

Administration

Media Ocean

Klantondersteuning voor MediaOcean's media-advertentiefactuurdatabase.
SQL / Database management

2023 – 2023
Nederland

Research Assistant

VU Amsterdam - Network Institute

Actieve bijdrage aan project voor het trainen van Transformer-modellen op MIDI-data voor de ontwikkeling van een cultureel onafhankelijk model.
Torch / Python / MIDI / WanDB

2019 – 2020
Nederland

Teacher Assistant

VU Amsterdam, HKU and Conservatorium of Amsterdam

- Leidde werkgroepen aan de VU Amsterdam over Deep Learning, Natural Language Processing, Machine Learning, Security & Machine Learning, en Machine Learning for the Quantified Self.
 - Werkgroepdocent aan de HKU: Gaf interactieve werkgroepen over de programmeertalen Python, C++ en JavaScript aan studenten van de HKU.
 - Gastdocent aan het Conservatorium van Amsterdam: Lezingen over effectief gebruik van audiotechnologie in de klas.
- Lesgeven / Python / Torch

2019 – 2020
Barcelona, Spanje

Intern

Music and Technology Group

Stage bij Music and Machine Learning Lab (Universiteit Pompeu Fabra): Muziekinformatie opvragen en polyfone audiotranscriptie met MLP (Scikit-Learn, Python, audioanalyse).
Scikit-Learn / Python / Audio Analyse

EDUCATION

09/2022 - 07/2024 **Master of Science - Artificial Intelligence**
Study over Artificial Intelligence.

VU Amsterdam

09/2017 - 07/2021 **Bachelor Of Arts**
Music and Technology

University of Art Utrecht

Bachelor Muziek en Technologie (focus op audiotechnologie, programmeren met audio in C++, C, JavaScript en Python, en muziekproductie/compositie).

LANGUAGES

Dutch - moedertaal, **English** - C1, **Portuguese** - B1