BAS MAAT

Data Scientist ~ Software Engineer

🌐 basmaat.com
✉ bjmaat@gmail.com
📞 +31 (6) 2133 5749
○ github.com/revess
📍 The Hague, NLD
in /in/bas-m-35b479132

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.
`Transformers Models  /  Torch`

Generative AI
2023

Disco GAN
setup.nl
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.
`GAN  /  Torch  /  VAE`

Generative AI
2020

SETUP Smartlappen
smartlappen.ai
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.
`GPT2 Finetuning  /  Torch`

EXPERIENCE

2022 – present
The Netherlands

Administration
Media Ocean
Maintaines customer support for MediaOcean's media advertising invoicing database.
`SQL  /  Database management`

2023 – 2023
The Netherlands

Research Assistant
VU Amsterdam - Network Institute
Actively contributed to a project training Transformer models on MIDI data to develop a culturally independent model.
`Torch  /  Python  /  MIDI  /  WanDB`

2019 – 2020
The Netherlands

Teacher Assistant
VU Amsterdam, HKU and Conservatorium of Amsterdam
- 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.

`Teaching  /  Python  /  Torch  /  Scikit-Learn`

2019 – 2020
Barcelona, Spain

Intern
Music and Technology Group
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.
`Scikit-Learn  /  Python  /  Audio Analysis`

EDUCATION

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

09/2017 - 07/2021 **Bachelor Of Arts - Music and Technology**
University of Art Utrecht
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.

LANGUAGES

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