

HEIN BROUWER

Master's student Applied
Data Science

 heinbrouwer.com



 github.com/oioi123

 /in/hein-brouwer-a76793326/

SUMMARY

Master's student in Applied Data Science at Utrecht University with expertise in combining data analysis, machine learning, and interactive technology to develop impactful, user-centered solutions. Particularly interested in explainable AI and its applications in enhancing user experience in data-driven applications.

SKILLS

Languages: Python, R, SQL, JavaScript, C#

Technologies: Statistical analysis, ML, LLM, XAI, LIME, Unity, Data Visualization, AR, React

PROJECTS

- | | | |
|--------------------|--|----------------------------|
| Unity & AR | Interactive AR Walking Tour
Created an interactive walking tour with AR scenes along the Utrecht water line. Designed and implemented augmented reality experiences using Unity. | Utrecht Water Linie |
| Unity & 360° Video | Bison Field Experience
Developed an interactive walking experience comparing past and present through an interactive 360-degree video of the bison field in Zeisterbos. | Zeisterbos |
| Python & XAI | Music Recommendation System
Investigated the effects of model explanations in emotion-based music recommendations for journaling apps. Researched real-time "black-box" model explanations (LIME) and analyzed their influence on user experience. All research code is publicly shared on GitHub. Grade: 8.0. | Bachelor Thesis |

EDUCATION

- | | | |
|-------------------|--|----------------------------------|
| 09/2024 - 07/2025 | MSc Applied Data Science
Expected graduation: July 2025. Upcoming Master Thesis: "Chain of Thought Approaches for LLMs" - Evaluating and comparing different chain-of-thought approaches for large language models across programming, question answering, and sentiment analysis tasks. Current grade-average: 8.0. | Utrecht University |
| 09/2020 - 07/2024 | BSc Information Science
Bachelor Thesis: "Investigating the Effects of Model Explanations in Emotion-Based Music Recommendations for Journaling Apps" (Grade: 8.0). Focus on user experience in data-driven applications. | Utrecht University |
| 09/2012 - 07/2019 | Atheneum highschool diploma
Graduated high school at the atheneum / vwo level. | Atheneum College Hageveld |

EXPERIENCE

- | | | |
|-------------------|---|---------------------------|
| 02/2025 - Present | Student Assistant
<ul style="list-style-type: none">Serving as a teaching assistant for the second-year Information Science course "User Experience and User Design" (INFOUE). Upcoming; I will be serving as a teaching assistant for the third year course "Responsible data science" (INFOB3RDS)Supporting students with course materials and practical assignmentsAssisting the professor with grading and administrative tasks Teaching / UX Design / Responsible Data Science | Utrecht University |
| 01/2025 - 02/2025 | App Developer (Freelance)
<ul style="list-style-type: none">Developed an interactive walking experience comparing past and present through an interactive 360-degree video of the bison field in ZeisterbosImplemented immersive digital storytelling techniques to enhance user engagement Unity / 360° Video / HLSL | boasmedia |
| 06/2024 - 08/2024 | App Developer (Freelance)
<ul style="list-style-type: none">Created an interactive walking tour with AR scenes along the Utrecht water lineDesigned and implemented augmented reality experiences using Unity Unity / AR / C# | boasmedia |
| 03/2022 - 11/2023 | Customer Service Representative
<ul style="list-style-type: none">Provided exceptional customer service in a fast-paced cinema environmentAchieved the "agressie training" from Bureau ControlMaintained a high standard of service quality Customer Service / Problem Solving | Pathé |

LEADERSHIP & VOLUNTEERING

Treasurer, Diescomissie Board at a student association

UMTC

- Organized events for 300+ attendees
- Managed a budget of €50,000
- Demonstrated financial responsibility and event planning skills

Fundraising Committee Member at a student association

Oog voor Utrecht

- Raised over €2,400 for charity
- Coordinated fundraising initiatives and community outreach

LANGUAGES & INTERESTS

Languages: Dutch (Native), English (Fluent)

Interests: Photography, Hiking, Hockey