

Rens Kievit

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ABOUT ME

I am a 23 year old Dutch-born student with a never-ending passion to explore and discover. In recent years I have discovered the field of Machine Learning and have spent a lot of time searching for methods to incorporate Machine Learning into both my research and my daily life.

EDUCATION

M.Sc. in Astronomy & Data Science

Leiden University
September 2021 - August 2023
• GPA = 8.4/10

B.Sc. in Astronomy

Leiden University
September 2017 - July 2021
• GPA = 7.1/10

HONORS & AWARDS

July 2017 - International
Baccalaureate in English

- Achieved at Higher Level 4

SKILLS

Research Skills
Problem Solving
FAIR Data Management

Programming: Python SQL \LaTeX
TensorFlow · Git

Languages:

- *Dutch:* Native Language
- *English:* Near Native Speaker
- *French:* Intermediate Speaker

HOBBIES & INTERESTS

Korfbal
Biking
Reading
• Fantasy
• Science-Fiction
• Self-Improvement

WORK EXPERIENCE

Leiden University - *Teaching Assistant*

February 2022 - July 2023

- I am a T.A. for the second years astronomy B.Sc. course *Modern Astronomical Research & Communication*, a course on teaching students research skills and introducing them to the professional world.
- Responsibilities centered on assisting students in performing their own literature research, and attending guest lecturers.

EasyWay - *Student Hiker*

September 2019 - January 2022

- At EasyWay my work mainly entailed transporting lease cars between car dealers and their customers, and being the initial contact point for customer service at the moment of hand off.

PREVIOUS RESEARCH

Leiden University & ESA/ESTEC - *Connecting Mother and Daughter:*

Creating an ideal Hipparcos - Gaia Crossmatch

September 2022 - August 2023

- We aim to improve upon earlier work on a match of Hipparcos objects onto the Gaia DR3, ideally creating a pure and complete cross-match between the two.
- Once this cross-match is created we will use it as a guide in the search for potential binary objects.

Leiden University - *Nothing but Bubbles: Studying a Thermally Expanding HII Region with Unsupervised Machine Learning*

September 2021 - July 2022

- I developed a tool based on a Gaussian Mixture Model to assist in the analysis and visualization of velocity-resolved spectral line observations.
- This research specifically focused on SOFIA [CII] observations from the expanding HII region NGC1977 in Orion A.
- I am currently assisting in the expansion of this model for future use in the GUSTSO mission.

Leiden University - *Milky Way Clouds as Templates for Clouds in External Galaxies*

Jan 2021 - July 2021

- Together with another B.Sc. student we studied high-resolution ratios between molecular rotational lines and H₂ column densities in nearby molecular clouds.
- This assisted in a larger study to develop templates for less-resolved extra-galactic molecular clouds.

OTHER PROJECTS

Leiden University - *The Interoperability of Patient Generated Health Data with FAIR Data Records*

September 2022 - December 2022

- We are investigating the interoperability between Patient Generated Health Data and VODAN-Africa, a FAIR based data framework set up in 8 African countries.
- This project specifically focuses on the health care system in Nigeria.

VOLUNTEERING

Astronomy on Tap - *General Volunteer*

March 2022 - May 2023

- At Astronomy on Tap we set up a monthly event where professional astronomers come to give outreach talks to the general public.
- My main responsibility in the team currently is ensuring the presentation and recording run smoothly from an IT perspective.

AECEE-Leiden - *Treasurer of Student Association*

September 2021 - September 2023

- I am responsible for the shared finances of a group of 10-20 people keeping track of monthly payments and costs of activities.

REFERENCES

These references are supervisors from my research projects. The order of their contact information corresponds to the order of previous research presented above.

- Dr. J. de Bruijne jos.de.bruijne@esa.int
- Prof.dr. A.G.G.M. Tielens tielens@strw.leidenuniv.nl
- Prof.dr. M.R. Hogerheijde michiel@strw.leidenuniv.nl