

Richelle van Capelleveen

Curriculum Vitae



Personal details

Dutch

The Hague
Netherlands

ORCID iD
GitHub

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Education

2020 – 2023	Master Astronomy and Data Science	Leiden University, Leiden
2015 – 2020	Bachelor Astronomy	Leiden University, Leiden
2012 – 2014	Bachelor Electrical Engineering Unfinished	Delft University of Technology, Delft
2009 – 2012	International Baccalaureate English A2 Higher Level Score: 6/7 (near-native proficiency)	Hofstad Lyceum, The Hague

Research

05-22 – 03-23	Master Research Project The Eclipse of ASASSN-21qj: A Collisional Event	Supervisor: Dr. M.A. Kenworthy
10-20 – 10-21	First Research Project Discovering Globular Clusters with Artificial Intelligence	Supervisors: Dr. E.M. Rossi and Dr. T. Marchetti
01-20 – 07-20	Bachelor Research Project The Rotation of Andromeda: Using Machine Learning to Select Isolated Gaia DR2 Stars	Supervisor: Dr. A.G.A. Brown

Publications

Kenworthy, M. *et al.* A planetary collision afterglow and transit of the resultant debris cloud. *Nature* 622, 251–254 (2023). <https://doi.org/10.1038/s41586-023-06573-9>

Computer skills

advanced	Python, \LaTeX
proficient	scikit-learn, Keras, TensorFlow, Arch Linux, Debian
intermediate	C++, hardware and networks, ADQL

Languages

native/bilingual	Dutch, English	fluent in speaking, reading and writing
beginner	French, German	intermediate reading, elementary speaking and writing

Interests

Professional: observational astronomy, exoplanets and planet formation, computational astrophysics, evolution and kinematics of clusters and galaxies, problem-solving, data analysis, machine learning, deep learning, digital typesetting (design)

Personal: literature, swimming, museums, hiking, gaming, scuba diving, skiing, photography

Experience

The Hague Netherlands	2023 – present	Leiden University <i>PhD Candidate in exoplanets / direct imaging at Leiden Observatory</i>	Leiden, Netherlands
ORCID iD GitHub	2022 – 2023	Leiden University <i>Student assistant for ‘Introduction to Astrophysics’</i> Creating the weekly homework assignments, explaining the answers in the weekly tutorial class and helping the students understand the course material.	Leiden, Netherlands
email: rvcapelleveen @outlook.com in://rfvancapelleveen	2022 – 2023	Leiden University <i>Writer</i> Writing and designing a syllabus with worked out problems and solutions relevant to first year BSc Astronomy courses.	Leiden, Netherlands
	2020 – 2021	Red Cross / HMC Westeinde <i>Volunteer for Ready2Help / Screening HMC Westeinde</i> As a volunteer for Ready2Help (and later as hospital employee) I screened visitors and patients of the HMC Westeinde hospital for COVID-19 symptoms during the COVID-19 pandemic.	The Hague, Netherlands
	2017 – 2018	Leiden University <i>Practicum supervisor for ‘Quantum Rules!’</i> Explaining complex phenomena in a simple, clear, and captivating way.	Leiden, Netherlands
	2015 – 2016	OGD IT services <i>Servicedesk employee of the Shared Service Desk</i> First line and/or second line support for over thirty clients varying from small companies, to government institutions, to multinationals. This job taught me how to quickly familiarise myself with a large amount of applications, assess risks and prioritise incidents.	Delft, Nederland
	2015	OGD IT services <i>Functional Application Manager at the Agency of the Ministry of Social Affairs and Employment (full-time gap year job)</i> Managing the applications that were part of the subsidy management system Diane. I was responsible for: <ul style="list-style-type: none">• Running tests in the acceptance environment;• Deploying changes to the production environment;• Detecting and solving incidents;• Conducting incident analysis to find patterns in incidents;• Formulating long-term solutions to issues exposed with incident analysis.	Delft, Netherlands
	2012 – 2014	Delft University of Technology <i>Student employee Marketing and Communication</i>	Delft, Netherlands

Extracurricular activities

Wellbeing committee (2023-present): member
Machine learning / AI Journal Club (2021-present): member
Haagse Watervrienden (2022-present): volunteer childrens’ swimming instructor
Laakhaventoren (2021): residents’ committee
Study association astronomy (2015-2016): bar committee
Study association electrical engineering (2012-2014): activity committee, winter sports committee, Maxwell committee (the Maxwell is the quarterly magazine of the Electrotechnische Vereniging), bar committee, mentor, photo committee of the freshmen weekend (EOW)

Memberships

Royal Netherlands Astronomical Society
European Astronomical Society