Kevin Reniers

kevin.reniers@ru.nl, LinkedIn: kevin-reniers,
https://kevin-reniers.github.io/website/

RESEARCH EXPERIENCE

Donders Institute – Lifespan Cognitive Dynamics Lab Sept 2025 – current
Research Assistant (part-time) *Nijmegen, the Netherlands*

- *Supervisor: Rogier Kievit*
- Supporting the CODEC (COgnitive Dynamics in Early Childhood) project
    - Using Dynamic Structural Equation modelling to study cognitive variability of primary school children at different temporal timescales (trial-to-trial, session-to-session and day-to-day).
        - Data simulation using the DCCN UNIX computing cluster.
        - Analyses on real behavioural data.
    - Helping with test sessions: both behavioural and MRI scanner sessions.
    - Outreach event: Organised a 'Treasure hunt of the Senses' at the Weekend of Science 2025 (Weekend van de Wetenschap 2025)

Blink Educatie Sept 2025 – current
Researcher (part-time) *'s-Hertogenbosch, the Netherlands*

- In collaboration with Harold Bekkering and Lieke van Lieshout from the Learning and Motivation Lab, we are setting up an ecologically valid experiment on the computational precursors of curiosity and curiosity-motivated learning in primary school children.
- Writing an easily digestible review paper for primary school teachers about the science of curiosity and what it can do for them in the classroom.

Donders Institute – Learning and Motivation Lab Sept 2024 – Aug 2025
Research Intern (part-time) *Nijmegen, the Netherlands*

- *Supervisor: Harold Bekkering and Lieke van Lieshout*
- Initiating and setting up a new fMRI experiment in collaboration with Roshan Cools on the role of curiosity and monetary reward incentives in semantic long-term memory.
- Independently and successfully defending the study plans during a Project Proposal Meeting at the Donders Institute.
- fMRI data analysis:
    - Data handling in the DCCN HPC cluster using UNIX.
    - Preprocessing using fmriprep.
    - Processing of behavioural data using self-made automated R scripts, including writing scripts for automatic creation of FEAT stimulus timing files and FEAT design files.
    - GLM design and first, second and third level statistical analysis using FEAT.
- Independently coding an MRI adaptation of the trivia paradigm program from the lab in Neurobehavioural Systems Presentation and creating scripts in MATLAB for handling cross-task randomization, stimulus creation and assignment and automatic survey creation in LimeSurvey.
- Creation of an extensive experimental manual for later use in the lab; including the experimental procedure, MRI scanner usage and checklists for a standardized and organised study run.
- Running fMRI experiments during and out of office hours, currently under supervision but invited to become a DCCN MRI certified user.

Donders Institute – Learning and Motivation Lab Jan – Aug 2025
Student Research Assistant (part-time) *Nijmegen, the Netherlands*

- *Supervisor: Harold Bekkering*
- Independently coding adaptations of the lab's trivia paradigm program for use of two Research Project 3 projects, using Neurobehavioral Systems Presentation – in accordance with the research demands of these bachelor's students.
- Creating a pipeline for automatic survey creation in LimeSurvey using MATLAB so that immediate and individualised surveys can be made by experimenters on the go, without them having much knowledge of coding or LimeSurvey.

Donders Institute – Learning and Decision-Making Lab Nov 2023 – March 2024
Student Research Assistant (part-time) *Nijmegen, the Netherlands*

- *Supervisor: Hanneke den Ouden*
- Independently designing a Pavlovian bias computer game intended for experimental use.
- Using the Unity game engine and the UXF package for experimental designs.
- Designing a study information website using HTML and GitHub hosting.

Donders Institute – Bike Simulator Lab March – July 2024
Student Research Assistant (part-time) *Nijmegen, the Netherlands*

- *Supervisor: Eric Maris*
- Designing and piloting a new experiment for testing proprioceptive feedback in balance control.
- In collaboration with the Technical Support group, iteratively designed a bike set-up that fully constrains participants' upper body motion to experimentally manipulate proprioceptive feedback usage in balance control.
- Using the custom build DCC bike simulator and the Optotrak kinematic measurement system to gather multi-session data from multiple participants.

TEACHING EXPERIENCE

Radboud University

Course: Mathematical Programming using MATLAB Oct 2024 – March 2025
Teaching Assistant (part-time) *Nijmegen, the Netherlands*

- *Supervisor: Eric Maris*
- Helping students with the necessary mathematical and MATLAB coding skills for research in neuroscience during weekly practise hours.
    - Teaching advanced mathematical concepts including; Linear Algebra, General Linear Models, Principal Component Analysis, Fourier Analysis and Convolution.
- Grading weekly assignments from in total seventeen student groups.
- Creating the final MATLAB exam and grading more than fifty exams.

Eindhoven University of Technology

Course: Thinking and Deciding Feb – June 2023
Teaching Assistant (part-time) *Eindhoven, the Netherlands*

- *Supervisor: Rianne Conijn*
- Creation and grading of test material for the Psychology and Technology bachelor's course on Cognition and Decision-Making.
- Answering questions from students on the online Canvas course forum.
- Reediting previous year's lectures into new flipped-classroom clips.

Eindhoven University of Technology

Course: Behavioural Research Methods 2 Nov 2022 – Jan 2023
Teaching Assistant (part-time) *Eindhoven, the Netherlands*

- *Supervisor: Rianne Conijn and Chris Snijders*
- Helping students learn statistical programming in Stata during on-campus tutorial hours.
- Answering students' questions on online fora.
- Grading collective work on weekly homework wikis.
- Giving a lecture on AN(C)OVA.

EDUCATION

Radboud University and Donders Institute Sept 2023 – Aug 2025
M.Sc. Cognitive Neuroscience (research) *Nijmegen, the Netherlands*
Cum laude

- Year-long research internship
  - Learning and Motivation lab of Professor Harold Bekkering
  - Thesis (*grade: 9/10*): "A Common Currency of Motivation: How Curiosity and Reward Shape the Brain's Memory Systems"
- Lab rotations:
  - Learning and Motivation lab of Professor Harold Bekkering
  - Learning and Decision-Making Lab of Dr Hanneke den Ouden
  - Neurophysiology of Active Perception lab of Dr Eric Maris

Eindhoven University of Technology Sept 2020 – Aug 2023
B.Sc. Psychology and Technology *Eindhoven, the Netherlands*
Cum laude

- Specialisation in Robotics
  - 'Signal analysis', 'linear algebra and advanced calculus', 'sensing, computing & actuating'.
- Minor in Physics Teaching
  - *Average grade: 9*
  - Teaching internship at Beatrix College in Tilburg and DOE040 in Veldhoven.
- Custom course package in Physics
  - Electromagnetism, thermodynamics, thermal physics, experimental physics, quantum mechanics
- Thesis and final project (*grade: 9/10*): "The relation between growth mindset, academic engagement and educational performance at university".
  - *Supervisor: Dr Uwe Matzat*

RELEVANT RESEARCH SKILLS AND KNOWLEDGE

Computer programming experience: R (mixed effects modelling, (Dynamic) Structural Equation Modelling, data management, general statistics), MATLAB, NBS Presentation, FSL (incl. FEAT), jsPsych (JavaScript and HTML), Stata, UNIX (HPC cluster), Unity (incl. UXF), Java, Python, Wolfram Mathematica, HTML

Statistics and modelling: (Bayesian) Mixed-Effects Modelling, (Dynamic) Structural Equation Modelling, (multilevel) data simulation *(incl. implementation in UNIX cluster)*, teaching-level general statistics knowledge *(theoretical background and practical implementation)*

Data acquisition: Functional magnetic resonance imaging (fMRI), Optotrak kinematics

Language: Dutch (native), English (Nuffic TTO, IB English A, C2 level)

EXTRACURRICULAR ACTIVITIES

- Secretary of the 8th board of the study association Dondrite at Radboud University (September 2024 – August 2025)
- Treasurer and later Supervisory member of the 2024 and 2025 Synapsium committee, a yearly recurring, student-organized neuroscience symposium (September 2023-August 2025)
- Senior editor at the student journal *Proceedings of the Master's Programme Cognitive Neuroscience* (September 2023-present)
- Member of the Degree Programme Committee (opleidingscommissie) of the Master Cognitive Neuroscience at Radboud University (October 2023-September 2024)
- Member of the Degree Programme Committee (opleidingscommissie) of the faculty of Innovation Sciences, representing the bachelors *Psychology and Technology* and *Sustainable Innovation* and the Masters *Human-Technology Interaction* and *Innovation Sciences* (September 2022-July 2023)
- Written two opinion piece articles in the Parool on topics related to the Dutch Educational System. See my author's page: https://www.parool.nl/auteur/kevin-reniers/
    - Opinie: 'Maak onderwijs écht democratisch, dan bloeien leerlingen op'
    - Opinie: 'Stop strafrechtelijke motivatie voor onderwijs en maak van de leerplicht een leerrecht'
- Participated in the accreditation of the master's programme in Cognitive Neuroscience at the Radboud University in the role of alumnus