

The University of Groningen and the Groningen Cognitive Systems and Materials (CogniGron) have **two** openings for PhD candidates to work within the CogniGron MOTION project.

CogniGron is a unique multidisciplinary research center. We do fundamental research into self-learning materials and systems for cognitive computing — computing that can learn and handle complex challenges super-efficiently, inspired by how the human brain works. This means rethinking the computer as we know it. So, we are on a mission: to find a new blueprint for future-proof computing.

MOTION aims at broadening our mathematical understanding of the multi-scale nature of neuro-morphic computations, and to exploit them in modern engineering challenges. The focus of the PhD projects is on developing novel mathematical techniques to explain brain-inspired computations and to propose a cognitive-based control framework that addresses multi-agent problems. The PhD positions are funded by the Ubbo Emmius Foundation and are offered as a 1+3 years contract. More information about the conditions of employment at the University of Groningen is available [here](#). If successful, the PhD candidates will be part of an active interdisciplinary group, and be supervised by dr. Hildeberto Jardón-Kojakhmetov and Prof. dr. Ming Cao.

Qualifications: Interested candidates

- should have demonstrable skills or background in one or more of the following fields: (applied) mathematics, systems and control theory or engineering, theoretical neuroscience, network science; or some other relevant field,
- be proactive, eager to work in a multidisciplinary environment, and have the disposition to engage in collaborative research,
- have excellent English communication skills.

To apply for either position, candidates should compile **one pdf file** containing:

- a detailed CV,
- a detailed letter of motivation,
- transcripts of bachelor and master studies grades,
- contact information of two references,

and send it to h.jardon.kojakhmetov@rug.nl **and** m.cao@rug.nl.

Applications will be evaluated as soon as they are received, and interviews will be arranged with potential candidates. The PhD positions are expected to start in the fall of 2024 or as soon as possible.

Informal inquiries about this position should be directed to h.jardon.kojakhmetov@rug.nl or m.cao@rug.nl.