Artificial Intelligence
Academic year 2019-2020

www.ru.nl/bachelors/ai

change perspective

Radboud University
If you think robots and machines that think for themselves are science fiction, we dare you to broaden your perspective!

Your programme

In addition to mathematics, computer science (programming) and other exact sciences, you will be studying psychology, neuroscience, logic and linguistics. After all, you will first need to know how the human brain works before you can start creating smart computers and robots. Conversely, computer models that mimic these brain processes can be quite useful in understanding the human brain. Devoting such attention to the interaction between humans and machines is what makes this study programme so unique in the Netherlands and the rest of the world. Artificial Intelligence is a young, dynamic field in which there is much to discover!

Characteristics of the programme

› Our Artificial Intelligence programme is based on three pillars: Brain, Cognition and Computer.
› Understanding and simulating the human brain occupies a special place in the Artificial Intelligence programme.
› The Artificial Intelligence programme in Nijmegen collaborates closely with several renowned research institutes. For example, the Max Planck Institute for Psycholinguistics, which is world famous for its outstanding language research and the world-renowned Donders Institute for Brain, Cognition and Behaviour are both on the Radboud University campus.
› You will be educated by lecturers from these top institutes, who are working on cutting-edge research.
› Every first-year student has their own student-mentor, whom they can approach if they have any questions. Likewise, all lectures and support staff are accessible to students, to realise an optimal environment for study and personal development.

Operating a computer purely with your mind through the smart measurement of brain activity. Predicting events by analysing tweets. A robot that does your housekeeping for you. Are these things possible? Yes! In the Bachelor's programme in Artificial Intelligence (AI) you will learn how to create these types of intelligent systems.

Groundbreaking insights are often found at the crossroads of disciplines. The vibrant and interdisciplinary field of Artificial Intelligence is a good example of this. We study human cognition in order to be able to understand and model artificial intelligence, with the aim of creating smarter computers and robots.

‘The atmosphere is why I decided to study AI in Nijmegen. The teachers are generally enthusiastic and open about your ideas.’
Thijs, third year student
After your Bachelor's degree

Move onto a Master's programme at Radboud University
- Artificial Intelligence (two-year Master's programme), with two specialisations: Cognitive Computing and Intelligent Technology
- Behavioural Science (selective research Master's programme)
- Cognitive Neuroscience (selective research Master's programme)
- Computing Science (two-year Master's programme)
- Information Sciences (one-year Master's programme)

Career opportunities
After you have completed your studies, work is available in a wide range of sectors, including: education, research, healthcare, telecommunications, ICT, investigations (including crime scene investigations), transport or financial services – basically, wherever there is a need for intelligent systems. Therefore, many of our students are hired even before graduating.

Numerus fixus: 170 students
Radboud University values small-scale and interactive education. That’s why we can only admit a maximum of 170 students to the Artificial Intelligence programme.

To register for the selection procedure, all applicants need to apply in Studielink between 10 October 2018 and 15 January 2019.

First year

In the first year of the programme you will develop your basic AI skills. You will study computing science, mathematics, robotics, psychology and logic. You will also learn skills and techniques to conduct research, including statistics and how to design an experiment. Furthermore, you will be heavily involved in modelling human thought processes in the computer. Making computer programs smarter, and thus user-friendly, is an important topic too.

Second and third years

In the second and third years, you will explore both the brain and the computer in greater depth. You will deepen your knowledge of programming, mathematics, statistics and modelling skills. For example, you will be introduced to neural networks: models of cognitive functions such as memory, observation, learning and language. This exploration of the brain and technology will raise many questions on ethics and views of humanity. In the third year, you can personalise your programme by selecting elective courses (24 EC). Finally, your Bachelor’s thesis will involve developing and conducting your own research project.

Course credits
- First year: 60
- Second and third years: 120

Interested in studying abroad? You can complete part of your programme at a foreign university or do an internship abroad! There are many foreign destinations available, such as: Glasgow, Graz, Linköping, Osnabrück, Trento and Valencia. You may also apply for a scholarship to attend university in Australia, Canada, China, Japan or the U.S.

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Visit the Open Day
Learn more about the study programme, get a taste of the campus and talk to students and teachers. When: 2&3 November 2018, 30 March 2019

Experience Days
Attend a lecture and work group and learn about how the study programme is structured. When: December 2018, Spring 2019

Student for a day
Are you almost convinced of your choice, but would you still like to attend a 'real' lecture? Become a 'Student for a day'! When: to be arranged by appointment

Want to know more? Please visit www.ru.nl/bachelors/ai

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