

# RESUME ROLAND MEERTENS

## PERSONAL INFORMATION

---

NAME **Roland Meertens**  
BORN **5 November 1990, Nijmegen**  
NATIONALITY **Dutch**

## EDUCATION

---

**Masters degree Artificial Intelligence** September 2012 - March 2015  
At the Radboud University Nijmegen with a specialisation in Cognitive Artificial Intelligence and Brain Computer Interfacing. Title of masters thesis: “A Scalable Mixed Initiative Dialogue Manager”.  
**Skills:** Machine learning, Bayesian methods, ROS, reinforcement learning, BCI, neural networks (deep learning), computer vision

**Bachelor’s degree Artificial Intelligence** September 2009 - April 2013  
Radboud University Nijmegen. Title of bachelors thesis: “Gesture based flight control”.  
**Skills:** human computer interaction, human robot interaction, Java, neural networks

## WORK EXPERIENCE

---

**Research Engineer Machine Translation Infor** September 2016 - current  
Accomplished higher translation quality by implementing neural machine translation and creating a novel technique for the verification of translated sentences.  
**Skills:** TensorFlow, Deep learning, Python, Docker, Amazons AWS stack

**Researcher at Technical University Delft** April 2015 - September 2016  
Worked on developing autonomous drones. Developed indoor localization (and mapping) using computer vision techniques, and obstacle avoidance with stereo camera’s. Algorithms were implemented that could do this with small amounts of computing power to keep all computing onboard. Our drone placed second in the IROS autonomous drone race.  
**Skills:** Computer vision, ROS, drones, PCB design, Python, C, SLAM (localisation and mapping)

**Internship at SpirOps in Paris** January 2014 - July 2014  
Created a dialogue management system for project Romeo. The goal of the project was building a system that can be used in healthcare to assist elderly people to keep their own lifestyle with little intervention from the outside world.  
**Skills:** Python, Naoqi

**Projects at Pinch of Intelligence** August 2014 - current  
In 2014 I founded the company Pinch of Intelligence (see [www.pinchofintelligence.com](http://www.pinchofintelligence.com)) created several small projects, and changed my site to a blog in 2016. Interesting project I made are: A demonstration to demonstrate how effective human guidance is for an AI for the game Super Mario Bros was published at the BNAIC in 2014, a 3D

BROUWERSGRACHT 91 - 3901TK VEENENDAAL  
✉ ROLANDMEERTENS@GMAIL.COM ☎ +31 (0)641642463

visualiser for MEG data web browsers that can be used with existing virtual reality devices, and a music recommender system for people that are learning a foreign language (which can still be found on [www.duomusico.com](http://www.duomusico.com)).

**Skills:** reinforcement learning, javascript, Android programming

#### EXTRACURRICULAR ACTIVITIES

---

**Editor in chief of De Connectie** November 2012 - August 2015  
Magazine for AI students (and others that are interested) made by students from several universities in the Netherlands. The magazine was not released for a long time and together with the new editorial office we made 4 new editions with of 450 per edition.

**Skills:** Writing, communication

**President of study association CognAC** Sept. 2011 - Okt. 2012  
The study association had 160 members and a budget of 3000 euro for activities. The goals of having more activities including bigger activities, gathering more sponsorship and having more study meetings for students were all reached during that year.

**Skills:** Communication, leadership

#### PERFORMANCE IN RELEVANT COMPETITIONS

---

**Datathon sustainable fishing: first place**

<http://www.pinchofintelligence.com/looking-back-at-my-first-datathon>

**IROS autonomous drone race: second place**

<http://mavlab.tudelft.nl/tu-delft-first-autonomous-drone-race/>

**Mario AI contest CognAC: first place**

Used reinforcement learning on a Mario AI. Later I turned my entry into a BNAIC 2014 conference demonstration:

[http://bnaic2014.org/?page\\_id=154](http://bnaic2014.org/?page_id=154)

#### SPORT ACHIEVEMENTS

---

**Cross for demonstrated marching skill** July 2014

Obtained for walking 50km per day four days in a row.

**Second place Niersdal survivalrun** September 2016

Big passion of me

#### MORE INFORMATION

---

**Personal blog** <http://www.pinchofintelligence.com>

**Collaborative blog** <http://www.andereintelligentie.nl/>

**Github** <https://github.com/rmeertens>

## PUBLICATIONS

---

- [1] Kimberly Mcguire, Guido De Croon, Roland Meertens, K Tuyls, and H J Kappen. Efficient Optical Flow Computation for Velocity Control on a Micro Aerial Vehicle. pages 2-3.
- [2] Roland Meertens. Teaching Mario . Demonstrating the effectiveness of human guidance in reinforcement learning. In *Proceedings of the 26th Belgium-Netherlands Artificial Intelligence Conference*, volume 2014, pages 185–187, 2014.
- [3] Clint Nous, Roland Meertens, Christophe De Wagter, and Guido De Croon. Performance evaluation in obstacle avoidance.
- [4] Amit Kumar Pandey, Rodolphe Gelin, Rachid Alami, Renaud Viry, Roland Meertens, Mohamed Chetouani, Laurence Devillers, David Filliat, Yves Grenier, and Mounira Maazaoui. Romeo2 Project : Humanoid Robot Assistant and Companion for Everyday Life : I . Situation Assessment for Social Intelligence. In *International Workshop on Artificial Intelligence and Cognition, 2nd Edition*, pages 140–147, 2014.