

Workshop Concept - AI explained

Building on our [Science Spaces project](#), we offer new workshops on artificial intelligence to Pasch students. The workshops take place either online or on-site. A group of participants and the IMAGINARY tutors playfully explore selected core concepts of Artificial Intelligence (AI). These are fundamental problems and dilemmas of AI or Machine Learning that are “experienced and discovered”. In addition to the core concepts, possible social effects of AI are jointly brainstormed and reviewed, for example in discussion games and role-plays.



The workshops' concept is designed so that all participants - regardless of their individual previous knowledge - can be actively involved. New materials and formats (digital or analog) were developed for the workshops. Different activities were designed for use in the workshop, which are particularly suitable for language acquisition: experiments, discussion games, interactive software, thought experiments, analogies.

We offer the following modules:

- Neural Numbers - Play, test and train a neural network
- Build your own AI - with cups, pens and paper
- Gradient descent - Find the treasure on the floor of the ocean with and without using AI
- Autonomous vehicles - How would you decide?
- Sumory - A game with maximum taste and many restaurants
- Carrot and stick - How a robot learns through rewards
- Music and AI - Playful experiments with an AI, the computer keyboard becomes a piano
- Perspective AI - A discussion game about possible technologies and their implication on society

The workshops are supervised by academics who have experience in international work with schools and in particular with German as a foreign language. To date, IMAGINARY has inspired millions of visitors in over 60 countries and 30 languages with science.

All material is freely available under open licenses. The workshops' content is based on the school workshops developed by IMAGINARY for the [German Year of Science on Artificial](#)

IMAGINARY

open mathematics

[Intelligence 2019](#) and the new traveling exhibition 'I AM A.I. - explaining artificial intelligence', which is financed by the Carl Zeiss Foundation. Visit the digital version of the science exhibition here: www.i-am.ai.

Organizational matters:

	online workshop	workshop on-site
Number of participants	6-8	12-15
Workshop leaders	1	2
Age of the participants	≥ 12 years	≥ 12 years
Language level	from B1	from A2
Duration of the workshop	4 days, 2 hours online modules plus ca. 2 hours offline activities each	3.5 days
Costs of the workshop	1500,- EUR	5000,- EUR
Additional costs	Physical material	Travel costs and physical material

We recommend that all participants have access to a computer with an Internet connection. Working in groups of two is also possible.

The courses can be held in German, English, Spanish, and French (other languages might be possible on request). In addition, we can offer special "Train the Trainer" workshops for teaching staff.

Your contact at IMAGINARY:

Dr. Andreas Matt
MAGINARY gGmbH
Mittenwalder Str. 48
10961 Berlin
phone: +49 30 24179643

mobile: +49 151 1836352
website: www.imaginary.org
email: info@imaginary.org