


# TAEWOON KIM

AI Researcher & Engineer


 taewoon.kim

 tae898@gmail.com

 tae898

 github.com/tae898

 Google Scholar

 /in/tae898

## SUMMARY

I love diving into AI stuff! I'm both a researcher and engineer in the AI world. It's like finding the sweet spot between brainstorming new ideas and making them actually work in real life. I believe figuring out and improving artificial general intelligence is super important for all of us. I'm all about open-sourcing projects because it's the best way to make AI better together. Feel free to check out what I'm up to on my GitHub and Google Scholar.

## SKILLS AND INTERESTS

**Research:** Artificial General Intelligence

**Languages:** Python, C++, C, Java, JavaScript, Shell Script, HTML, CSS

**Frameworks /Libraries:** Pytorch, TensorFlow, OpenCV, NumPy, SciPy, Flask, Jupyter Notebooks

**Platforms:** Docker, Linux, GCP, AWS

## EDUCATION

- 2020 - 2024 **PhD. Artificial Intelligence, Vrije Universiteit Amsterdam, the Netherlands**  
Titled "*A Machine With Human-Like Memory Systems*". This machine is equipped with an external memory system, modeled with a knowledge graph, and uses reinforcement learning to learn essential human skills, such as managing memory, reasoning, exploring, etc.
- 2015 - 2018 **M.Sc. Computer Science, Hamburg University of Technology, Germany**  
Focused on deep learning and computer vision. Wrote M.Sc. thesis "*One Shot Learning for Object Recognition in Pick and Insert Applications*" in collaboration with ABB.
- 2008 - 2015 **B.Sc. Electrical Engineering, Yonsei University, South Korea**  
Focused on digital signal processing and computer vision. Wrote B.Sc. thesis "*Obstacle detection for the blind in C++ with OpenCV*". The lengthened period of study includes 2 years of mandatory social service.

## EXPERIENCE

- 2020 - 2024 **AI Researcher, Vrije Universiteit Amsterdam, the Netherlands**
- Part of the PhD program.
  - Carried out research in AI encompassing NLP, Computer Vision, Reinforcement Learning, Knowledge Graphs, etc., most of which can be found on my GitHub and Google Scholar.
  - Taught computer programming courses, e.g., Python, and AI courses, e.g., board games with search algorithms and machine learning.
  - Supervised B.Sc. and M.Sc. theses.
- 2018 - 2020 **Computer Vision Engineer, Nect, Germany**
- Worked with machine learning (mostly deep learning) to improve ID card and self verification processes.
  - Mostly dealt with speech, image, and video data.
  - Working at a start-up has enabled me to work closely with DevOps and Front-end developers and to better understand the big picture of AI companies.
- 2018 **Intern and M.Sc. Thesis Student, ABB, Germany**
- Applied robot vision with a RGBD camera.
  - Trained computer vision deep learning models, e.g., ResNet, to extract features relevant for robotic pick and place skills.
  - Used both RobotStudio and Robot Web Services based on RESTful APIs to interact with both virtual and real robot controllers.