Bachelor/Master Thesis – Reinforcement Learning for Medical IoT

Job ID: R-10053395

Munich

Are you inspired by machine learning, data, AI, currently enrolled at a German university, and ready for a new challenge in reinforcement learning (RL) and its applications in medical IoT? Do you want to contribute to real-world applications and gain experience developing innovative ideas? Then you will want to be a part of the Artificial Intelligence Competence Center at NXP, a leading semiconductor company.

Responsibilities:

At the AI Competence Center, we are looking for a student passionate about reinforcement learning (RL) and AI applications in the domain of medical IoT. Leverage your creativity for implementing new, fun, and innovating ways of diabetes care solutions in one of our light-house projects. During this thesis, our team members will support you to scout, develop, and deploy state of the art Reinforcement learning algorithms. In the project, you will learn to push your software development and machine learning skills further. You will invent, implement, and integrate a reinforcement learning algorithm into the controller block of our medical IoT use case. After your thesis, you and the team will be proud of having developed a reinforcement learning algorithm for our Health IoT solution.

Preferred Skills:

- Very strong skills in programming languages such as Python, or C/C++
- Ideally experience with Reinforcement Learning and OpenAI's Gym/Gymnasium for RL experimentation
- Experience with Linux environments
- Fundamental concepts of neural networks (PyTorch/Tensorflow)
- Contributions on GitHub is a plus

Your Profile:

- Currently pursuing a degree in computer sciences, robotics, electrical engineering or similar (Bachelor or Master)
- Affinity with the medical IoT domain
- Strong critical and analytical thinking
- Good English communication skills for interaction with our multinational team across multiple sites
- Capability to work independently and accurately
- Looking for a challenging student position in a leading EdgeAI high-tech company

Please note: There is the opportunity to familiarize yourself with the subject matter as an intern or working student before we start the thesis contract.

We are looking forward to receiving your application!

TUM Supervisor:
Chair of Robotics
Artificial Intelligence and Real-Time Systems
Prof. Alois Knoll – k@tum.de

Please submit your application via email:
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