PhD Student Position in Reinforcement Learning and Planning of high performance Neural Network Architectures
Aalto University

Job Title	PhD Student Position in Reinforcement Learning and Planning of high performance Neural Network Architectures
Department	T410 Dept. Electrical Engineering and Automation
Institution	Aalto University , , Finland
Date Posted	Mar. 8, 2024
Application Deadline	Open until filled
Position Start Date	Available immediately
Job Categories	Graduate Student
Academic Field(s)	Electrical and/or Electronics
Job Website	https://aalto.wd3.myworkdayjobs.com/aalto/job/Otaniemi-Espoo-Finland/PhD-Student-Position-in-Reinforcement-Learning-and-Planning-of-high-performance-Neural-Network-Architectures_R39021
Apply By Email	

Job Description

The Robot Learning research group is seeking a talented PhD student with strong interest in Reinforcement Learning and Planning.

The Aalto Robot Learning research group operates in the intersection of artificial intelligence and robotics. We focus on developing methods for reinforcement learning, robotic manipulation, decision making under partial observability, imitation learning, and decision making in multi-agent systems. The goal of the research group is to help robots understand what they need to learn to perform their assigned tasks, and, thus, make robots capable of operating on their own and pro-actively help humans. To accomplish these goals the research group develops novel decision-making methods and

uses these methods to solve unsolved robotic tasks. For more information, please see [url=https://rl.aalto.fi/]https://rl.aalto.fi.

The main task of the PhD student will be to develop new reinforcement learning or/and planning methods for optimizing neural network architectures. The exact direction of the research is chosen depending on your experience and interests. Please relate clearly to the research topic in your Letter of Motivation, in particular, what kind of research topics in reinforcement learning and planning interest you.

Outstanding researchers from the areas of Machine Learning, AI, Robotics, and related areas including Reinforcement Learning, Control Engineering, Computer Vision, Statistics & Optimization, or Mathematics & Physics are welcome to apply. The candidate is expected to conduct independent research and at the same time contribute to the topics listed above. Successful candidates will be furthermore given the opportunity to work with undergraduate and M.Sc. students.

The research group collaborates internationally and nationally with research groups in computer vision, uncertainty modeling, robotics, construction, mobile heavy machines, human-robot interaction, reinforcement learning, imitation learning, multi-agent systems, under-water vehicles, and robot motion planning. There will be ample opportunities for international collaboration.

WE OFFER
The position will be filled for 2 + 2 years (doctoral studies are expected to take 4 years in total). The starting date is in April 2024 or as mutually agreed. The salary will be based on both the job requirements and the employee's personal performance in accordance with the salary system of Finnish universities. The starting salary for a doctoral student is approximately 2700 EUR/month and increases with thesis progress.

We offer a wide range of staff benefits, such as occupational health care, flexible working hours, excellent sports facilities on campus and several restaurants and cafés on campus with staff discounts. The position is located at the Aalto University Otaniemi campus which can be easily reached by public transport.

HOW TO APPLY
Please submit your application through our online recruitment system (please use the "Apply now!" link below to acces the recruitment system).

The closing date for applications is March 23th, 2024 (23:59 EEST).
Please write your application and all the accompanying documentation in English and attach them in

PDF format. Please attach only the following documents to your application:

* A letter of motivation describing your research interests and how the research fits to the Robot Learning research group (max. 1 page)
* Curriculum vitae (including the contact details of two referees)
* A list of publications as a part of the curriculum vitae
* PDF copy of your MSc and BSc degree certificates, including transcripts of all MSc and BSc university records (grades and courses) and their English translations (Finnish and Swedish certificates are also accepted)

Please note that our recruitment system allows max 5 attachments, so please combine the copies of certificates and transcripts in one PDF, if necessary.

ADDITIONAL INFORMATION
For further information, please contact Assistant Professor Joni Pajarinen, joni.pajarinen@aalto.fi. Additional information in recruitment process related questions, please contact HR partner Camilla Hanganpää, camilla.hanganpaa@aalto.fi.

Aalto University is where science and art meet technology and business. We shape a sustainable future by making research breakthroughs in and across our disciplines, sparking the game changers of tomorrow and creating novel solutions to major global challenges. Our community is made up of 13000 students, 400 professors and close to 4500 other faculty and staff working on our dynamic campus in Espoo, Greater Helsinki, Finland. Diversity is part of who we are, and we actively work to ensure our community's diversity and inclusiveness. This is why we warmly encourage qualified candidates from all backgrounds to join our community.

Finland is a great place for living with or without family - it is a safe, politically stable and well-organized Nordic society. Finland is consistently ranked high in quality of life and was just listed again as the happiest country in the world. You can find more information about living in Finland [url=https://www.aalto.fi/en/node/615766]here & [url=https://www.aalto.fi/en/services/welcome-to-aalto-university-and-finland-info-package]here.

To learn more about us and your future colleagues at Aalto check the following videos:
[url=https://www.youtube.com/watch?v=5k_og_6zUJQ]Aalto University - Towards a better world, [url=https://www.youtube.com/watch?v=dUfEGVM-ZP8&feature=youtu.be]Aalto People, [url=https://www.youtube.com/watch?v=ZK6pDWm1_CE]Shaping a Sustainable Future, and

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[url=https://www.youtube.com/watch?v=ftUP7zefyBY]Automation and Electrical Engineering. Read more about working at Aalto: [url=https://www.aalto.fi/en/node/118186]https://www.aalto.fi/en/careers-at-aalto. Check out our virtual campus experience: [url=https://virtualtour.aalto.fi/]https://virtualtour.aalto.fi/

Contact Information

Please reference Academickeys in your cover letter when applying for or inquiring about this job announcement.

Contact

Finland