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**Nettside:** <http://www.hvl.no>  
**Omfang:** Heltid  
**Varighet:** Prosjekt

## This is Western Norway University of Applied Sciences

With about 17 500 students, Western Norway University of Applied Sciences is one of the largest higher education institutions in Norway. A broad range of academic programmes are offered at Bachelor, Master and PhD levels, spread out on five campuses in Førde, Sogndal, Bergen, Stord og Haugesund.

Our ambition is to build stronger and more solid academic and research environments that will interact nationally and internationally. The aim is to become a recognized participant on the international higher education arena. Increased international cooperation and engagement in externally funded projects will work towards this goal.

With effect from 1 January 2024, a new faculty was established at HVL, which is the result of a merger of the current Faculty of Engineering and Natural Sciences and the Faculty of Economics and Social Sciences.

The Faculty of Technology, Environmental and Social Sciences has approximately 5 500 students and over 500 full-time employees distributed between campuses in Sogndal, Førde, Bergen and Haugesund. The faculty has a wide range of education at both bachelor's and master's level within engineering and natural sciences, economics and administrative subjects, maritime subjects, social sciences and the humanities, in addition to PhD courses in computer technology, responsible innovation and regional development and in nautical operations.

The Department of Computer Technology, Electrical Technology and Science has around 950 students and 140 employees in Bergen, Førde and Haugesund. The department is responsible for bachelor's courses in information technology and engineering courses in automation with robotics, computer technology, electrical power engineering, electronics and communication technology, in addition to teaching mathematics, physics and statistics in the engineering courses at the faculty, as well as preparatory courses for the engineering courses. The institute also has two master's programmes, one in applied computer technology and engineering and one in software development in cooperation with the University of Bergen. Furthermore the institute is responsible for the doctoral program in computer technology

## Postdoctoral Fellow in Robot- Assisted Raspberry Production

### Western Norway University of Applied Sciences, Faculty of Technology, Environmental and Social Sciences has a vacancy for a 2- year position as Postdoctoral Fellow in Robot-Assisted Raspberry Production

We are looking for a highly motivated and talented postdoctoral research fellow to be part of the HVL Robotics Research group. The position is associated with the research project "FutuRaPS: Future Raspberry Production System for Western Norway" financed by the Norwegian Research Council. If you are interested in the application of robotics to horticulture, this position could be for you.

#### About the project/ work tasks

The project aims to develop the future robotic raspberry production in Norway with Western Norway as a pilot area. The project employs state-of-the-art robotics and big data, together with plant and biological sciences, to enable a transformational effect on horticultural processes that until now have been purely manual operations, and thus developing and securing this important sector.

Within the project, special emphasis is given to modularity in the robotic systems employed, to explore maximising utilisation through robotic precision spraying, harvesting, transport and monitoring, while also adapting the cropping system. This includes long-cane raspberry plants in pots and novel polytunnel arrangements. Adopting a system of systems approach, the project investigates possible changes to all these aspects.

With this project, you will work on how to enable profitable robot operations in the short Western Norway raspberry season through increasing utilisation, i.e enabling the same modular platform to perform precision spraying, transport, monitoring and selective harvesting. Of particular interest is how a mobile robot platform can cover the needs for spraying, replacing tractors and hence allowing narrower aisles, and what the benefits can be of precision spraying with a robotic arm.

The project has a tracked mobile robot with a robot arm available for experiments on spraying and harvesting, and a wheeled mobile robot for data gathering. There is a dedicated 50m polytunnel with experimental raspberry crop available for the project at the Njøs Fruit- and Berry Center in Leikanger.

The Postdoctoral Fellow will have his/her place of work and affiliation with the Faculty of Technology, Environmental and Social Sciences at campus Førde, or campus Sogndal by further agreement, but the candidate should expect to travel between campuses both for field work in Sogndal/Leikanger and lab-related work i Førde.

Starting date: as soon as possible.

## Research environment

The Postdoctoral Fellow will be part of the HVL Robotics Lab, a research and innovation centre for robotics at HVL. HVL Robotics have access to state-of-the-art research facilities at Campus Førde, and a field lab for robotic- and data-driven raspberry production at Campus Sogndal/Leikanger.

The computer science research environment at Western Norway University of Applied Sciences has a strong focus on use-inspired and applied research, and on ICT as an enabling technology. The research environment has cooperation with many national and international research groups, and with national and regional industry partners. The research programme includes the research themes of software engineering, engineering computing, sensor networks and robotics, grid computing and physics data analysis, machine learning, and interactive and collaborative systems.

The Fellow will also be encouraged to take part in the supervision of MSc and PhD candidates, including the PhD candidate working on the system-of-systems aspects of the FutuRaPS project. You will be part of a larger project group, including another Postdoctoral Fellow focusing on robotics, and several other academics across robotics, data science and plant science. You will also interact with stakeholder partners in the project, including growers and cooperatives.

## Qualifications:

### Qualification requirements:

- You must hold a PhD-degree or have submitted your doctoral dissertation for evaluation in the field of robotics, cybernetics or an associated field.
- Research experience in robotics, preferably with applications in agriculture
- Good proficiency in English
- Willingness to travel to carry out project activities inside and outside of Norway

### The following qualifications will be given special emphasis:

- Background in robotics applied to agriculture, or related field, and relevant publications
- Experience with the Robot Operating System (ROS)
- Experience with control and operation of mobile robot manipulators
- Knowledge of strategies for outdoor positioning and navigation
- Prior participation and involvement in research and innovation projects
- Experience in supporting relevant MSc and PhD projects
- Proficiency in English, optionally Norwegian or another Scandinavian language

Availability to start in the position as soon as possible will be considered an advantage, due to the short time frame of the project.

### Personal characteristics:

- Confidence in working independently
- Ability and willingness to work in inter- and transdisciplinary teams
- Excellent communication skills

### About the position of postdoctoral research fellow:

The candidate must hold a PhD-degree or have submitted their doctoral dissertation for evaluation within the closing date of the application. It is a condition for appointment that the dissertation is approved. It is a condition of employment that the PhD has been awarded.

The postdoctoral position is a fixed term position with the primary objective of qualifying the appointee for work in top academic positions. If the appointee is interested, and if the institution is in need of additional teaching staff, the employment period may be extended by up to one year. Teaching and other duties will in such cases be added to the position.

Individuals may not be hired for more than one fixed-term period as a postdoctoral research fellow at the same institution.

The completion of the project proposal for the qualifying work, as well as a progress plan, will be developed in cooperation with the supervisor and head of department. It is a requirement that the project is completed in the course of the period of employment.

## Application procedure:

Applicants are asked to submit their application and CV online. Please use the link "Apply for this job" ("Søk stillingen").

The following documentation should be uploaded as an attachment to the online application:

- A CV with a complete list of academic publications and teaching activities
- Diplomas and certificates
- Copies of selected academic publications (no more than 3)
- A copy of the PhD thesis
- Documents related to other achievements relevant to the position
- Names and contact details of 2 references (name, relation to candidate, e-mail and telephone number)

Applicants with a degree from a country other than Norway, need to attach a certified translation of the diploma and transcripts of grades to English or a Scandinavian language, in addition to the original documents, if the original is not in any of these languages. It is required that the applicant encloses a recognition document showing that their degree is equivalent to a Norwegian bachelor's degree, master's degree or PhD. [You can read more about applying for recognition of foreign higher education here](#). The Norwegian Directorate for Higher Education and Skills (HK-dir) offers an automatic recognition document for certain degrees from selected countries. If the applicant's degree is covered by the automatic recognition, it will be sufficient to attach this document. [Read more about automatic recognition here](#).

Applications will be evaluated by an expert panel of three members. Applicants should note that the evaluation will be based on the documentation submitted electronically via Jobbnorge within the submission deadline. The applicants are responsible for ensuring that all the documentation is submitted before the closing date. It is of utmost importance that all publications to be considered in the evaluation are uploaded as an attachment with the application, since these are sent electronically to the expert panel. Applications cannot be sent by e-mail or to individuals at Western Norway University of Applied Sciences.

### **Salary:**

- Good occupational pension, insurance and loan schemes from The Norwegian Public Service Pension Fund
- Exciting academic environment with the possibility of competence enhancement and development
- Opportunities for exercise during working hours

Initial salaries will be offered at code 1352 - Postdoctor in the Civil Service pay grade table scale.

There is a compulsory 2 % deduction to the pension fund (see <http://www.spk.no> for more information). The successful applicant must comply with the guidelines that apply to the position at any time.

### **General information:**

The appointment will be made in accordance with the regulations for State employees Law in Norway ("Lov om statens ansatte"). Organizational changes and changes in the duties and responsibilities associated with the position must be expected.

State employment shall reflect the multiplicity of the population at large to the highest possible degree. Hence, Western Norway University of Applied Sciences has adopted a personnel policy objective to ensure that we achieve a balanced age and gender composition and the recruitment of persons of various ethnic backgrounds.

Information about the applicant may be made public even though the applicant has requested not to be named in the list of applicants. The applicant will be notified if his/her request is not respected.

Short-listed applicants will be called in for an interview.

Employment on the condition of work and residence permit being granted.

Western Norway University of Applied Sciences is subjected to the regulation for export control system. The regulation will be applied in the processing of the applications.

### **Contact:**

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### **Inclusion, challenging norms, collaboration**

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### **Tilleggsinformasjon**

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- Røyrsgata 6 6856 Sogndal (Sogndal Kommune)