Senior Developer in Research Infrastructure

UiB - Knowledge that shapes society
Through robust and close interaction with the world around us - globally, nationally and locally - we shall be instrumental in building a society based on knowledge, skills and attitudes.

Do you want to take part in shaping the future?

Video: https://www.youtube.com/watch?v=JRdMR-PbhBQ&t=4s

Senior Developer in Research Infrastructure
A permanent position is open in the Scientific Computing group at the IT-department, University of Bergen. The position is connected to development and operations of the research e-Infrastructure. The main tasks of the position is to port code to GPGPU and accelerators and to implement new algorithms on this hardware. You will work together with the research groups developing the software, hardware vendors and Sigma2.

The IT-department's mission is to deliver high quality IT services and contribute to achieving UIB goals. We deliver a wide range of the IT services in development, operations, governance and user support. The IT department has around 110 employees. The IT department is prioritizing continuous improvement via Lean methodology and follows ITIL framework. We are increasingly working with projects and applying standard methods and frameworks for this.

Work tasks and Duties:
- Porting Scientific Software code to GPGPUs and accelerators, including LUMI system installed in Finland with over 550 petaflops peak performance
- Being part of the team that builds and operates the national HPC and storage systems (FRAM (35 000 cores), Saga (10 000 cores), Betzy (172 000 cores), NIRD (11 PiB))
- Involvement in local, national and international projects and collaborations such as PRACE, EuroHPC and NeIC
- Additionally, you may be involved in:
  - Taking part in the group's HPC user support activities
  - Developing internal and external service documentation
  - Conducting relevant training courses

Qualifications and personal attributes:
- Deep knowledge of accelerator coding, code porting and optimization
- Proficiency in one or several of the following programming languages:
  - C, C++, Fortran
- Very high programming competence within relevant fields
- Experience with the MPI communication standard in the context of accelerators
- Experience with HPC, either as a user or an administrator
- Knowledge of Linux-based HPC systems and batch queuing systems
- Experience with the operation and debugging of complex IT systems
- Fluent English, both oral and written
- Higher education, minimum Master’s level, Phd level encouraged. Formal education can be compensated by documented relevant work experience
- Norwegian language is not a requirement but is an advantage. For a successful candidate without knowledge of Norwegian language it will be required to take and successfully pass at least level 2 of the Norwegian language course at UIB within 2 years.

The following aspects will be considered in addition to the requirements:
- Experience with OpenCL, CUDA, OpenACC.
- Experience with GPU, FPGA, ASICs, IPU, new accelerators (EPI)
- Knowledge of NUMA
- Experience with Python and Julia
- Experience with version control
- Experience with coordinating developers
- Good communication skills in both written and oral
- Experience with giving courses

Personal skills
We can offer:
- A good and challenging international working environment with professional challenges and opportunities for personal and skills development
- Position as Chief engineer (code 1087) or Senior Engineer (code 1181) depending on qualification, 53-71 (currently kr 474 500-658 300), or 58-71 (currently kr 516 400-658 300). In the case of a highly qualified applicant, a higher salary may be considered
- Enrolment in the Norwegian Public Service Pension Fund
- Good welfare benefits

General information:
Detailed information about the position can be obtained by contacting: head of infrastructure Jan Kristian Walde Johnsen (jan.johnsen@uib.no, mobile 917 15 378) or head of scientific computing Alexander Oltu (alexander.oltu@uib.no, mobile 468 19 137).

There is a possibility of extending the number of positions in case we receive many good and relevant applications.

The one who will be appointed may be given other duties in the department's work tasks.

We encourage women to apply. If multiple applicants have approximately equivalent qualifications, the rules pertaining to moderate gender quotas shall apply.

We encourage recently graduated students with strong programing skills and experience with GPU to apply. The state labour force shall reflect the diversity of Norwegian society to the greatest extent possible. People with immigrant backgrounds and people with disabilities are encouraged to apply for the position.

Information about applicants may be made public even if the applicant has asked not to be named on the list of persons who have applied. The applicant must be notified if the request to be omitted is not met.

For further information about the recruitment process, click here.

About The University of Bergen
Jobnorge-ID: 200145, Søknadsfrist: 24. februar 2021