Fraunhofer-Chalmers Centre for Industrial Mathematics (FCC) is the Swedish node of the largest applied research organization in Europe, Fraunhofer-Gesellschaft, and conducts research based on advanced mathematics and simulation to support efficient product realization and optimize production processes for companies in several branches. Our software is daily used at more than 100 leading companies across the world.

We have an open position for a talented

Software developer – High Performance Computing

About us
FCC's department for computational engineering is performing state-of-the-art applied research and development on numerical methods and algorithms for simulation of fluid dynamics, particles, structural mechanics, electromagnetics, and multiphysics. Our vision is to increase the use of advanced simulation in industry and the research is integrated in user-friendly software that offer unique possibilities for virtual product and process development. We are located in modern premises at the Chalmers Science Park, campus Johanneberg, Gothenburg, Sweden.

The position
Your primary responsibility will be development of our multiphysics software platform IBOFlow® and its add-on modules. You will work with all parts of the development process including analysis, specification, implementation and maintenance. We develop all software based on modern C++ with a major focus on high-performance, parallelization and acceleration on GPUs using CUDA. We have strong emphasis on CI and apply a DevOps approach with toolchains including Docker, Slurm and Jenkins. You will join an agile and fast-paced team with large experience in algorithmic design and numerical computations, who all are committed to solving challenging problems with big industrial and societal impact. Our customers and partners are globally leading companies in the manufacturing, pharmaceutical, wood and paper, infrastructure, mining and electronics industries, as well as research institutes in Sweden and EU.

Your profile
You have a Master of Science or PhD in computational engineering, applied mathematics, engineering physics, applied mechanics or other relevant area. We expect that you have excellent documented programming skills. Past experience of GPU acceleration using CUDA and large-scale software projects are meritorious. You have a genuine interest for mathematical modeling and simulation, and excellent communication skills in written and spoken English. You are an ambitious team player who are able to work independently and meet deadlines.

Interested?
Welcome to submit your electronic application including cover letter, CV, course grades, and other relevant documents no later than **April 16** to: comp-recruit@fcc.chalmers.se

Note that evaluation of applications and interviews will take place continuously during the application period and you need to have a valid work permit for the European Union to apply.

For questions about the position, please contact head of department Fredrik Edelvik, comp-recruit@fcc.chalmers.se, +46(0)730794220