



We are looking for you!

Join ESI
As
Software Developer (f/m)
Physics Framework
Location: Stuttgart or Darmstadt



Your Mission:

As a Software Developer in the context of ESI's Real-Time Physics Solver Framework you will support the design, implementation and optimization of high performance rigid and elastic body dynamics, kinematics and collision handling components, extending our in-house high fidelity physics engine.

You will partner with simulation experts and software engineers in our team to create high performance, high accuracy solver approaches, collision handling for rigid and elastic entities as well as extend physical modelling to cover new phenomena. Basing on the physics framework you will have the opportunity to contribute to our virtual reality application IC.IDO, which provides powerful end user functionality in the context of virtual engineering and prototyping as well as Human Factor simulation. Together we will live our shared ambition to create a seamless, life-like virtual world with fully realistic behaviors.

Signs that you are a strong candidate:

- You live and breathe software engineering and system design just as well as physics and mathematics.
- You are proactive, self-motivated and you like to show initiative. You see what needs to be done and you get it done.
- You strive to expand your own horizon. You are always eager to learn and conquer new domains.
- You're a team player. You don't like to go off and work only on your own; you're a natural collaborator and enjoy bringing your team of stakeholders along with you to talk to and develop ideas and approaches together.

Your Responsibilities:

- Contribute to the design, implementation and maintenance of ESI's High Fidelity Real-Time Physics Solver Framework.
- Support the definition of system architectures for new components, improving and enhancing the existing framework.
- Support the design and verification of mathematical solver algorithms in key solver components.

Context:

ESI is pioneer and leader in the field of virtual prototypes and testing software and listed on NYSE Euronext Paris stock market since 2000. ESI has won the confidence of many customers including e.g. Volkswagen, Airbus, Areva, NASA through its 40 years of expertise. ESI employs more than 1100 people across the globe and offers a wide range of employment opportunities, mainly in sales, technical support to customers and software development.

IC.IDO is the virtual reality platform within the ESI Group. It is the leading software for targeted, interactive, immersive visual decision-making. Our solutions are delivered using state-of-the-art technologies to bring our customers' products to life in 3D. Many global companies use the IC.IDO product line software throughout their entire product development process from design to manufacturing.

Our Requirements:

- Proficiency with C++, object oriented software design and the associated tools of the trade.
- Excellent understanding of analysis, linear algebra and real-time numerical linear algorithms.
- Professional experience in real-time physics framework design – e.g. 3D game physics for rigid and deformable entities.
- Professional experience in collision detection frameworks for rigid and elastic bodies.
- Experience in optimization and parallel algorithms.
- Ideally Bachelor's degree or higher in Physics, Applied Mathematics, Computer Science or in a related field.
- Ideally professional experience in kinematics or motion dynamics simulation.

Your career opportunities:

Working at ESI is an exciting and rewarding experience. You will find yourself in a highly innovative and challenging international work environment with a global software vendor, using the latest technologies, and pushing yourself to new limits with interesting financial packages.

An attractive, welcoming and international working culture provides you with a unique opportunity to accelerate your career!

Interested

Please send your CV and motivation letter with your salary expectation in English by e-mail to: jobs@icido.com.

Contact:

ESI Software Germany GmbH
Human Resources
Liebknechtstrasse 33
70565 Stuttgart
Germany

Phone: +49 711 27 303 0

Fax: +49 711 27 303 110

Email: jobs@icido.com

More jobs @ ESI: www.esi-group.com/company/join-esi