



Software Simulation Developer

Icosystem Corporation is a successful, growing company with world-class expertise in complexity science and evolutionary computing. Our work combines cutting-edge scientific research and applied client projects that range from social network analysis and consumer behavior modeling to interactive evolutionary search and design. Icosystem provides a friendly, collaborative, supportive and intellectually stimulating work environment, with a unique opportunity to bridge the scientific and commercial worlds. Our Cambridge, MA location fosters interactions with a vibrant academic and technological community.

Job Description

We are currently looking for highly talented Java developers to help us engineer computer simulations for our research and consulting projects. You will work on client engagements and internal R&D assignments in a creative and highly collaborative environment. Your work will span all tiers of an application development from front-end UI work to backend DB work. Willingness to do some mentoring and project management is a plus.

The ideal candidate will possess strong analytical skills, communication and collaborative skills, the ability to think outside the box, and a keen intellectual curiosity. Excellent knowledge of software engineering concepts and practices as well as proficiency in their consistent application is essential. Self-motivation and independence are highly valued characteristics.

Familiarity with techniques such as agent-based simulation, evolutionary computing, swarm intelligence, artificial life, neural networks, dynamical systems, machine learning and data mining is helpful but not strictly required. Candidates with prior experience in modeling natural or artificial systems, especially in a commercial setting, are particularly encouraged to apply.

Successful candidates will have the following experience and qualifications:

- A minimum of bachelor's or an equivalent degree
- Solid knowledge of Java (4+ years), OOP, design patterns, and other software engineering practices is essential

In addition, the following skills would be highly desirable:

- IoC/DI Experience (Spring is a plus)
- Swing Experience
- Multiple Languages (JVM Languages a plus, especially Groovy/Scala)
- Experience with CI (Hudson), Gradle, Git
- Experience or interest in TDD, pair programming or other contemporary programming practices



Why work for Icosystem?

At Icosystem, you'll have exposure to a number of unique software design challenges:

- Performance matters: Our simulations are computationally intensive; we need to find performance bottlenecks and resolve them through good design.
- Domain Modeling: modeling complex domains is core to what we're looking for in a developer. We're looking for someone who can help us think through different designs, ask good questions and implement quality domain models.
- We value code quality. Even though we work on a number of short projects it's important to us that code is clean and tested.

While our projects are fast-paced and demanding, we enjoy a relaxed, collaborative, supportive and interactive office atmosphere, generous office space, and very competitive benefits package that includes 3 weeks of paid vacation plus up to 15 paid holidays, company retreats, 401(K), educational support, stock options and more. If you are interested in becoming a part of an energetic, international team of some of the world's most innovative thinkers in complexity science and evolutionary computing, please send your resume and cover letter to: simdev@icosystem.com

Icosystem Corporation is an Equal Opportunity Employer.