

## **SENIOR CORE PROGRAMMER – PS3**

**Last Updated:** April 2010

**Location:** Halifax

**Manager:** Technical Director/Lead Programmer

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### **Job Description**

We are looking for a Senior Core PS3 Programmer to join our dynamic game development team who can take responsibility for developing low-level core (engine) systems that make optimal use of the PS3 architecture. This is a full-time, permanent position based in our Halifax, NS (Canada) studio.

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### **Responsibilities**

- Solve the problems of running a high-end game within the technical constraints of the console platforms.
  - Optimizing memory utilization, moving hot-spot pieces of code to the SPUs (on the PS3), multithreading existing non-parallel code, and generally ensuring high frame rates and a smooth gaming experience while not sacrificing graphics and audio quality.
  - Develop and optimize cutting edge core game code and/or middleware on PC and next-generation consoles
  - Design and implement efficient and maintainable code (primarily in C++ although C or assembly language may be required occasionally)
  - Analyze code performance and optimize code appropriately for speed and memory usage
  - Maintain good programming documentation
  - Plan your schedule effectively using SCRUM/AGILE methodology
  - Support the team in fostering and improving software development processes
  - Mentor team members when required
  - Contribute to the overall technology strategy of the company
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### **Requirements**

- Expert knowledge of the Sony PS3 hardware platform, development tools & instruction set
- Specialist knowledge in at least one area of engine systems programming
- Be able to identify multiple solutions to complex problems and recommend the most effective course of action
- Experience in multithreading
- Excellent understanding of CPU and GPU bottlenecks
- Excellent understanding of performance sensitive programming (algorithmic and low level optimizations)
- (3D) Math
- Strong object-oriented design skills and proficiency in C++ programming and debugging
- Passion for creating and implementing good solutions, not just writing good code
- Knowledge of software engineering practices

- Write robust, maintainable code
- Disciplined and self-motivated with a strong work ethic with an ability to work well autonomously, meet deadlines, prioritize and tackle multiple tasks and complete deliverables with a high standard of quality
- Enthusiasm for game development
- Interest and understanding of game design and game mechanics
- Good team player
- Good written and oral communication skills

**The ideal candidate will have experience in most of the following areas:**

- Excellent knowledge of PS3 system programming with experience developing multi-core/multi-threaded systems.
- Experience in the video game industry
- Experience in cross-platform development
- Creation of tools and workflows
- Experience maintaining code performance through profiling and optimization
- Scripting Languages (Lua, Python, etc..)
- Experience with multiple game engines and middleware (example: Unreal, Gamebryo, GFx, Havok)
- Familiarity with build pipelines
- Experience mentoring other engineers
- XML

**Experience and Educational Requirements:**

- 4 years or more in software game development, ideally in a similar role
- 3 years or more in graphics programming
- At least 1 shipped game console title (e.g.: Xbox 360, PS3, Wii, PS2/Xbox)
- BSc in CS, SE or equivalent

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**Social advantages and work conditions:**

1. Competitive basic wage rate
2. Collective benefit plan including full family coverage for medical, dental and optometric care
3. Relocation packages offered to candidates from outside the city or country. (Help in obtaining visa, etc.)
4. Flexible vacation and statutory holidays
5. One week paid vacation between Christmas and New Year's
6. The position is 40 hours a week - Monday through Friday, on site

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**Working in Halifax:**

The city of Halifax is the largest city on Canada's east coast and with direct flights to most major cities in North America and Europe, is the hub of travel for the Atlantic. As one of Canada's oldest cities, Halifax balances old world architecture with modern living making for a convenient downtown that maintains

incredible character and beauty. With all the amenities of a big city, a friendly laid back culture and a low cost of living, Halifax is a great place for people of all ages to call home.

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Please submit the following directly to [seniorjobs@longtailstudios.com](mailto:seniorjobs@longtailstudios.com):

- Cover letter
- Current CV / Resume
- Please reference the job title **PS3 Core Programmer** in the subject line of your email.