Oleg Bisker

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Objective

Seeking a challenging software development position. Bringing 7 years of hands-on experience in diverse types of software development focused on computer graphics, including: movie animation, game development, scientific computing, and visualization.

Skills

Programming:	C/C++, DirectX, OpenGL, HLSL, CUDA, OpenMP, Matlab
Software:	MS Visual Studio, Perforce, Alienbrain, CVS, Office, Photoshop
OS:	Windows, Linux
Languages:	Russian, French

Work Experience

June 2010 – September 2010

Dreamworks Animation, Redwood City, CA
Surfacing R&D Intern

- Surveyed and analyzed state of the art research in appearance modeling of hair.
- Implemented a physically-based hair shading system with intuitive art-directed controls.
- Provided technical support in the form of bug fixes and performance optimization to production pipeline.

January 2007 – November 2009

Incinerator Studios - THQ, Carlsbad, CA
Programmer

- Acted as primary graphics engineer on a shipped cross-platform game title. Developed high performance shadow rendering, post-FX HDR pipeline, graphics shaders, and an efficient texture streaming system. Interacted extensively with artists to create/optimize the desired artistic/visual effects.
- In a small team, ported an X360 racing game to the PS3 (9 months). Developed accelerometer and motion-driven controls for steering and other gameplay elements. Created original car-paint and dirt graphics shaders, for best performance and quality on the PS3. Contributed to a variety of game engine components such as, audio playback/streaming, UI elements, and performance tuning.
- Implemented a flexible spline (rail) camera system for a multi-platform game. Created a plugin for a design tool to lay out and visualize camera paths.

June 2005 – January 2007

General Dynamics Robotic Systems, Westminster, MD
Software Engineer

- Participated in software development for the 2007 DARPA Urban Challenge. Developed simulation algorithms for predicting dynamic-obstacle motion to facilitate collision avoidance.
- Created a 3D engineering tool to support algorithm development for diverse simulation tasks. The tool visualized multi-layered digital road networks and simulation assets overlaid on real satellite imagery.
- Worked on a developer team for the SMI (Soldier Machine Interface). Acted as lead for interfaces, rendering algorithms and visualization. Development done in templated C++ using MFC, OpenGL, and a GIS SDK.

June 2004 – August 2004

Computer Graphics Lab Johns Hopkins University, Baltimore, MD
Research Assistant / Programmer / Interface Developer

- Worked on application development for a model viewing and manipulation tool relating to the Digital Hammurabi research project. Developed improvements to streamline a highly layered graphical API.

Education

University of California San Diego   San Diego, CA
M.S. Computer Science 2011 – 3.88 GPA

Computer Graphics Concentration - Thesis: Acquisition and Modeling of Light Scattering from Yarn Threads

Johns Hopkins University   Baltimore, MD
B.S. Computer Engineering 2005