

Adam Preble

Objective: **Currently employed; not accepting offers.**

Education: **Rochester Institute of Technology** **Rochester, NY**
B.S. Computer Engineering May 2004
GPA: 3.28/4.00

Hardware Skills Digital system design with hardware description languages, EDA/design flow, Semiconductor validation, Computer architecture, Programmable logic devices, VLSI custom layout, Embedded systems

Software Skills JIT compilation quality analysis, EDA validation scripting, 3D graphics programming (real-time), Vertex shaders, Object oriented programming, Network simulations, GUIs, Multitasking microcontrollers, Functional languages

Hardware Platforms Opteron, Athlon64, Dual-Core AMD family

Languages: (Hardware and Software) Java, Perl (especially for EDA applications), C/C++, C#, Assembly (x86, a64, MIPS, Motorola 68000C/C++ and HC12), Java, Verilog (RTL for synthesis), VHDL, Microsoft Vertex shader assembler, PALASM

Software & Tools Java (IBM, Sun, BEA), MS Visual Studio .NET (2003, 2005), Gcc compiler, Mentor Graphics (Design Architect, IC Layout Tools, Modelsim), PSPICE, MATLAB, MS Office

Operating Systems Windows NT/98/2K/XP/2003 Server/XP64, Linux (SuSE, SLES, Mandrake, Red Hat Enterprise), Cygwin

Current Employment **Advanced Micro Devices: Software Research Engineer**
Austin, TX
Study JIT compilation and code generation of Java Virtual Machines and the Microsoft .NET framework. Suggest improved machine-level code to vendors. Run benchmarks and automate the benchmarking process. Relay to the microprocessor architects how virtual machines use the hardware.

Address: 2200 South Pleasant Valley Rd. #914
Austin, TX 78741

Cell #: 585-260-1147
Home #: 512-220-8447

Work **Advanced Micro Devices: Software Engineering Co-op**

Experience: **Austin, TX**

Designed, developed, and executed a random Microsoft vertex shader assembler generator. Developed a test and report utility for validating a vertex shader compiler against a reference.

Intel Corporation: Validation Engineering Co-op

Folsom, CA

Executed constant tests on a graphics pipeline and made test decisions. Improved the testing system by writing Perl scripts tailored to the testing environment. Interacted with a complete semiconductor validation strategy.

RIT Department of Computer Engineering: Research Co-op

Rochester, NY

Researched wireless sensor networks. Experimented with different routing and clustering methods. Developed experiments with both OPNET and ns2.

Projects: Contactless Dance Pad

A dancing game foot controller that uses laser beams instead of foot contact.

http://www.ce.rit.edu/projects/srprojects/2003.1/rt_dancepad/

View Frustum Culling

A study in view frustum culling of octrees using a variety of methods.

<http://www.rit.edu/~acp7569/3d/culling/culling.htm>

Club - Active member of Smoothtalkers at AMD – A Toastmasters club

Affiliations: - Member of IEEE

- Secretary – RIT Society of Computer Engineers (Summer 2001-Spring 2002)

Availability: **Unavailable, Currently employed. U.S. Citizen.**