

José Hiram Soltren

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SYNOPSIS	<p>System Software Engineer and MIT alum. Ten years experience in various areas: Linux, kernel development, device drivers, computer graphics, firmware, video decoding, end user software, and systems administration.</p> <p>Additional specialties: automotive, aviation, machining, CAD, CAM, cycling.</p>
EDUCATION	<p>Massachusetts Institute of Technology, Cambridge, MA</p> <p><i>Master of Engineering</i>, Electrical Engineering and Computer Science Aug 2009</p> <ul style="list-style-type: none">• Course work in operating systems, biomedical informatics, network protocols, scientific computation, signal processing, power electronics.• Wrote thesis on using Semantic Web technologies to determine privacy policy compliance of database queries using a rules-based reasoner. <p><i>Bachelor of Science</i>, Electrical Engineering and Computer Science Jun 2007</p> <ul style="list-style-type: none">• Minor in Science, Technology, and Society.
EXPERIENCE	<p>Senior System Software Engineer</p> <p>NVIDIA Corporation, Santa Clara, CA and Austin, TX May 2011 - present</p> <ul style="list-style-type: none">• Member of elite team responsible for the proprietary NVIDIA graphics driver stack for Linux, FreeBSD, and Solaris.• Technical lead - Video Decode and Post-Processing API for UNIX (VDPAU).• Ported VDPAU to a brand new video decoder architecture.• Added support for next generation H.265/HEVC hardware video decode to the Linux driver and to VDPAU. https://github.com/NVIDIA/vdpau-hevc-example• Participate in hardware architectural reviews for video decoding hardware.• Responsible for video post processing shaders in Cg and GLSL languages.• Expertise in OpenGL multithreading, graphics pipeline configuration, rendering.• Key member of new hardware bringup process:<ul style="list-style-type: none">– Communication with hardware, software, and chip delivery teams.– Preparation test plans and programs to execute on pre-silicon software and hardware emulation environments.– Execution of test programs on early silicon in first days of bringup.• Debug and fix critical stop-ship issues related to video decoding on GPUs.• <i>Technologies used:</i> C, C++, Python, Makefile; gcc, gdb, Linux kernel, NVIDIA GPUs, OpenGL, firmware/microcodes. <p>Member of Technical Staff</p> <p>Model N, Redwood Shores, CA Aug 2009 - Nov 2010</p> <ul style="list-style-type: none">• Member of middleware team, writing pricing, contracts, customer, compliance, and commitments software for pharmaceutical and semiconductor industries.• Technical ownership of key contract pricing feature in product.• Worked with customers and management to define and prioritize features.• Implemented customer facing features in both back-end application server (Java) and front-end user interface (JavaScript).• <i>Technologies used:</i> Java, JavaScript, Oracle SQL; Apache Tomcat, Oracle WebLogic, IBM WebSphere, Oracle SQL Server.

EXPERIENCE

Systems Administrator

D. E. Shaw & Co., L.P., New York, NY Jun 2007 - Jun 2008

- D. E. Shaw & Co. is a global investment management firm located in NYC.
- Member of Systems team, responsible for all desktop, server, networking, and communications hardware and software infrastructure.
- Provided direct end user support through Systems Helpdesk rotations.
- Served as liaison between front office and Systems engineering specialists.
- Drove user requests and tickets to completion.
- Designed, and managed building of, video conferencing rooms.

COMMUNITY

Weekend Residential Faculty

Eastside College Preparatory School, East Palo Alto, CA Aug 2012 - Jul 2013

- Operated weekend dormitory program for high school students.

Big Brother

Big Brothers and Big Sisters of the Bay Area, Milpitas, CA Jan 2011 - Dec 2012

- Served as friend and mentor to a young man through his formative years.

Trip Leader

Bike & Build, Inc., Brooklyn, NY and Philadelphia, PA Jan 2006 - Aug 2008

- Planned and led two cross-country charity bicycle tours for young adults.

LANGUAGES

Fluent in: English, Spanish, C.

Proficient in: OpenGL, Java, JavaScript, R, C++, Scheme, Perl, Python, PHP, MATLAB, Cg, GLSL, CUDA.

CITIZENSHIP

United States