Søren F. Ragsdale

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Skills:

- CG Visual Effects production experience: lighting, rendering, compositing
- Production Pipeline/Tools development in Perl, Python, Tcl/Tk, SQL, Java
- Shader writing for RenderMan (SL, C DSO, Slim templates), Maya (C++)
- User experience in RenderMan/Slim, Mental Ray, Shake, Maya, UNIX, OSX
- Maya plugins and scripting with MEL
- System and network administration for various Unix platforms (Linux, FreeBSD, Solaris, Irix, OSX)

Supplemental Information:

Reel Breakdown | Reel (Quicktime) | Software Project Summary

Film Production Experience:

Senior TD: Sony Pictures Imageworks *(06/05-current)*

Unnamed Project: *(06/06-current)* Senior TD to the Virtual Buildings group.

Superman Returns: *(06/05-05/06)* Senior TD, Virtual Buildings team. I designed and evaluated possible rendering requirements and approaches. Maintained and extended existing shaders, wrote new shaders as-needed and provided shader support to the rest of the VB team. Coordinated new multistream rendering standards with other shader writers and compositors who would use its results. Attended weekly "town council" meetings to coordinate our requests and workflow with other departments and productions. Resurrected the Sony crowds and cars pipelines, animated and rendered CG people particle systems and procedural CG car animation for the "Metropolis Disaster" sequence.

Lead TD: Meteor Studios *(11/04-5/30/05)*

Fantastic Four: *(11/04-5/05)* Lead TD for "Fantastic Four". Wrote their ambient occlusion and HDR global illumination pipeline with custom shaders and templates in Slim, including extensive caching optimizations to avoid the high rendering expense traditionally associated with that technique. Supervised 'bb' sequence lighting, spotted and fixed rendering problems and production complications.

Lighting TD: Sony Pictures Imageworks *(9-03-10/04)*

Polar Express IMAX: *(08/04-10/04)* Rendering and compositing right-eye views for 3D production of a previously 2D movie. PEX IMAX presented a host of technical challenges beyond regular C&L duties: shot asset restoration, verification and re-use, debugging previous artists' shots, exactly replicating old renders with a constantly evolving tool set, debugging new types of stereo on an accelerated sproduction schedule.

Spider Man 2: *(9/03-5/04)* Lighting, rendering, and compositing within the CG Building team. Responsibilities included diagnosing and fixing render errors within Renderman and Mental Ray and compositing lighting layers for photorealistic all-CG cityscapes and CG scene extensions to match live action sets.

Lighting TD: ESC Entertainment *(1/03-9/03)*

Lit and rendered shots for the "Trinity Falls" (tf) sequence on Matrix Reloaded and the "Super Burly Brawl" (sbb) sequence for Matrix Revolutions. In additon to lighting and rendering, I wrote several new programs to increase flexibility and efficiency in a very young production pipeline.

Lighting TD, Software Engineer: Tippett Studio *(3/99-1/03)*

I worked in the technical directors' department performing the following duties as needed:

R&D: worked with sequence leads to plan the technical aspects of the "how will we do this?" problem
Support: I maintained the software and scripts used to assemble and render shots for several deparments, and stayed on on call for emergency bugfixes and "one-off" scripting projects.
Shader Writing: I maintained existing shaders and designed new shaders for Maya and RenderMan.
Programming: Projects included MEL and C++ modules for Maya, Perl, Csh, Python shell scripts, and many of the tools in the TD production pipeline.
TD lighting: In late 2000 I began lighting shots as a full TD
Diplomacy: My experience with artistic and technical projects give me opportunities to act as a "go-between", resolving conflicting interdepartmental priorities and clarifying communication.

Screen Credits: Blade II, The One, Evolution, Cats and Dogs, The Haunting, Hollow Man

Uncredited: Bicentennial Man, Komodo, Mission to Mars

Intern: Matte World Digital *(5/97-8/97)*

Duties included network administration of a medium-sized 10/100-baseT Ethernet network of Irix, MacOS, FreeBSD, and Windows NT machines.

Projects: The Truman Show, Wag the Dog, Titanic

Professional Appearances: **Siggraph 2005, "Stupid RAT Tricks":** Hybrid Ambient Occlusion, a method for drastically reducing ambient occlusion render times by combining cached contributions from static scene elements with live values from moving elements.

Professional Affiliations: ACM/Siggraph
Visual Effects Society (member 979)

Non-Film Experience

Lawrence Livermore National Laboratory, Computer Security Technology Center *(6/98-3/99)*

The Computer Security Technology Center provides software and support for various government agencies, including the Department of Energy and the Department of Defense. I worked on the Network Intrusion Detector (NID) project, a network sniffer with advanced pattern matching, selective traffic capture and playback features. Duties include user training, Solaris and Linux-specific porting, and new feature integration.

Intern Programmer: XaosITools *(5/96-8/96)*

Worked in the ISPK development group. ISPK is Xaos's compiled scripting language, combining the speed of C with the objects of C++ and the flexibility of PERL. Time mostly spent optimizing ISPK's memory manager and developing a suite of corruption and leak detection tools.

Teacher's Aide: Cs227, Cs127a *(Spring 1997, Fall 1997, Spring 1998)*

TA for three consecutive semesters under Stuart Reges. I introduced previously nontechnical students to the technical challenges of computer programming, debugging, and good program design. Students ranged from the casually interested to BSCS-seeking undergrads. TA duties included organizing and presenting secondary lectures and providing outside tutoring.

U of A College of Medicine - Learning Resource Center: *(1/94 - 5/98)*

Support person for the University of Arizona College of Medicine's Learning Resource Center. Assisted medical students with computer usage and technical problems, in addition to supporting video editing, scanning, and prepress work for residency-bound students and faculty.

Database Contractor, University of Pennsylvania Hospital, Hematology Lab *(5/93-9/93)*

Contracted to build a patient database to facilitate the movement of patient data between labs and allow doctors and clinicians easy access to records. The database included automatic data input from the flow cytometry lab.

Education: Bachelor of Science, University of Arizona

- Graduated May, 1998
- Major: Computer Science
- Minors: Math, Business

Relevant Classes: CSc422: Concurrent Programming, MAP420: Advanced Business Law, CSc470: Artificial Intelligence, CSc433: Graphics CSc430: Large Programs with C++, CSc445: Algorithms and Efficiency, CSc452: Operating Systems, CSc342: Data Structures+Algorithms, CSc372: Comparative Programming Languages, CSc227: Program Design in C, CSc237: Machine Organization, MAr196a: Computer Animation

Outside Interests: Sport motorcycle riding and maintenance
Brazilian jiu jitsu
First Responder, volunteer emergency medical services for large events
Independent, archival, old & unusual film