**EDUCATION**

**Stanford Graduate School of Business** Stanford, CA 08/11 – 06/12

**Master of Science, Management**Stanford Sloan (MSx) Master’s Program

**Academy of Art University** San Francisco, CA 01/06 – 08/11

**Master of Fine Arts, Digital Animation & Visual Effects**Magna Cum Laude

**Stanford University** Stanford, CA 09/92 – 12/96

**Bachelor of Science, Symbolic Systems**Concentration in Human-Computer Interaction

**TECHNOLOGY SKILLS**

**3-D Animation & VFX:** Maya, Nuke, After Effects, Adobe Creative Suite, 3D Studio Max, Houdini, RealFlow

**Application Development:** Python, Perl, Mel, C++, Java, JavaScript, HScript, SQL

**Systems Administration:** Unix (SunOS/Solaris, Linux, HPUX), Windows, MacOS

**Network Management:** CA Unicenter, HP OpenView, MRTG, CiscoWorks/View, BMC Patrol, SNMP

**Web Technologies:** HTML, XML, CGI, LDAP, TeamSite, Documentum, Ultraseek

**PROFESSIONAL EXPERIENCE**

**AvantGravity** San Francisco, CA 2008 - present

**Owner, Digital Animator**

Engaged in promoting scientific communication, education, exploration, and discovery through the dynamic medium of digital animation. Projects include:

**NASA / Goddard Space Flight Center**

* Animation describing a “transformer pulsar” binary star system.
* Animation explaining how the Fermi satellite observes the early universe through gamma ray detection.
* Animation depicting a “black widow pulsar” binary star system.
* Animation demonstrating the extending truss of the NuStar satellite in low-Earth orbit.
* Animation describing high and low energy gamma-ray photons racing through quantum foam.
* Animation describing a gamma-ray burst emitted from an exploding neutron star.
* Animation describing double-peaked gamma-ray emissions from the outer gap of a spinning pulsar.
* Series of six animations describing the inner workings of the GLAST (Gamma-ray Large Area Space Telescope) satellite for a nationally televised documentary.

**California Academy of Sciences**

* Built and textured a digital model of the NOAA-18 weather satellite for the new Morrison Planetarium's flagship production, “Fragile Planet”.

**Planet Labs**

* Marketing animation describing constellation of earth-imaging nano-satellites.

**Blue Marble Space**

* Promotional animation for a non-profit research institute focused on space exploration and awareness.

**In Ohm Entertainment**

* Sell-sheet and poster art-work for upcoming film “The Principle”.

**Metanoiaa**

* Series of animations describing Milankovitch precessional cycles and galactic orbital dynamics.

**Neuroblast**

* Promotional animation involving neural networks, micro circuitry, and character work.

**Palo Alto Institute**

* Promotional animation for the Palo Alto International Film festival.

**ImageMovers Digital (Disney)** Novato, CA 02/09 – 01/11

**Stereoscopic Technical Director**

Developed and supported the Stereo Department’s pipeline, automating the throughput, processing, storage, and selective retrieval of tens of millions of image files and compositing elements in the making of two high-profile Hollywood films. Created a variety of Python tools, extensions, and plugins for Autodesk Maya to facilitate mutli-rig stereoscopic camera layout, compositing, and shot publishing. Created robust, dynamic visual interfaces to a Shotgun database within the Nuke compositing platform using Nuke’s Python API – these tools were used daily by over 100 artists and TD’s in five departments, and were widely recognized to have saved the studio well over $1 million through workflow-efficiency improvements.

**CTB/McGraw-Hill Education** Monterey, CA 04/04 – 02/09

**Content Management Architect (Technology Operations)**

Architected, implemented, and supported three TeamSite content management systems, which serve hundreds of users in dozens of school districts as collaborative development environments for creating, deploying, and scoring modular standardized tests for K-12 education. Authored numerous Perl scripts and extensions to fully automate back-end administration for tasks ranging from user account and content center creation to intelligent system management and security alerts.

**Pacific Gas & Electric** San Francisco, CA 09/02 – 10/03

**Web Applications Developer (PoR Intranet Team, Consultant)**

Designed and implemented intranet and internet search solutions using the Inktomi Enterprise Search Platform and TeamSite for PG&E Newco Energy Corporation. Developed a number of Perl applications for automating the migration of web content and streamlining work-flow, including a dynamically self-organizing hierarchical search taxonomy using Verity’s Content Classification Engine, and a universal JavaScript wrapper for internal web-based applications that ensures a consistent look and feel to the new intranet site without the need for an application server.

**Neuroblast** San Francisco, CA 03/02 - 09/02

**Consultant**

Helped launch an Artificial Intelligence research startup (formerly known as “Emergent Minds, Inc.”), focused on evolving adaptive neural learning systems. Assisted in establishing a corporate identity, writing federal grant proposals, and communicating the company’s business plan to potential investors.

**Brocade** San Jose, CA 09/00 - 05/02

**Senior Web Engineer (Web Technology Group, Full-Time Employee)**

Developed and supported Brocade’s TeamSite content-management system and heavily customized Ultraseek search engines for Brocade’s internet, extranet, and intranet web sites. Served on the IT Architecture Council, and created over 20 self-sustaining information-management applications for streamlining work-flow as well as automating access and management of corporate systems and data.

**InnoVentry** San Francisco, CA 08/99 - 09/00

**Senior Software Developer (Infrastructure Engineering, Full-Time Employee)**

Lead the design and implementation of an automated, end-to-end management infrastructure for monitoring a wide-area network of check-cashing ATM’s using CA Unicenter and custom-designed SNMP agents. Received the highest annual performance rating (97%) of all 52 software engineers in the technology development department.

**Microsoft** Redmond, WA 02/99 - 08/99

**Software Design Engineer IV (Information Technologies Group, Consultant)**

Designed and implemented an SNMP-based HP OpenView network management system for monitoring Microsoft’s world-wide telecommunications network, including technologies such as voice-over-IP, PBX switching systems, Polycom video-conferencing, broadband, voicemail, and more.

**Synopsys** Mountain View, CA 12/96 - 02/99

**Systems Administrator III (Core Services, Full-Time Employee)**

Designed and implemented a web-based Network Operations Center to manage a WAN of over 35,000 heterogeneous nodes (Solaris, SunOS, HP-UX, NT, MacOS, Cisco, Network Appliance, etc.) using HP Network Node Manager 6.0 as the base platform; capabilities include geographical and service-level views of the network, fault-management, performance-monitoring, system accounting, historical analysis, and security. Created several customized WEB applications from the ground-up using Perl, JavaScript, and VB as well as several C extensions to Network Node Manager using the OpenView API. Promoted twice within the first 18 months of hire.

**Blyth Software** Foster City, CA 02/95 - 12/96

**Product Support Engineer (Staff)**

Joined this early-stage software company during my junior year in college, and was promoted twice within my first year of hire, ultimately working with Engineering to QA test new components of Blyth’s primary software product, OMNIS7: a cross-platform programming environment for developing, deploying, and maintaining front-end client/server applications with connectivity to industry-standard databases through middleware such as ODBC, SQL\*Link, and Open Client. Authored sample applications distributed to thousands of customers as examples of coding techniques.

**Course Certificates**

**System Admin II for Documentum 5** EMC (Pleasanton, CA) 2005

**System Admin I for Documentum 5** EMC (Pleasanton, CA) 2005

**Technical Fundamentals of Documentum 5** EMC (Pleasanton, CA) 2004

**Using JSP Technology in Dynamo** ATG (San Francisco, CA) 2001

**Server-Side Programming with Java** ATG (San Francisco, CA) 2001

**Practical Applications of XML** Brocade (San Jose CA) 2001

**Java Programming II** GE Access (San Francisco, CA) 2001

**TeamSite User Training** Interwoven (Sunnyvale, CA) 2001

**TeamSite System Administration** Interwoven (Sunnyvale, CA) 2001

**Gasper Manager Administration** Gasper Corporation (Dayton, OH) 2000

**Java Programming** Sun Microsystems (McLean, VA) 1998

**HP-UX 10.x System Admin for HP 9000** Hewlett-Packard (Atlanta, GA) 1997

**HP-UX Troubleshooting** Hewlett-Packard (Mt. View, CA) 1997

**Windows NT Administration** Microsoft (San Jose, CA) 1997

**OMNIS 7v3 Programming** Blyth Software (Foster City, CA) 1995