

## Resume'

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### Education

University of California, Berkeley MSEECS (1981)	GPA: 4.0/4.0
University of California, Berkeley BSEECS (1974)	GPA: 2.9/4.0
Chabot Jr. College, Hayward AA, General Engineering(1972)	GPA: 3.33/4.0

### Professional Goals:

- 3D Computer Graphics, Scientific Visualization, Image Processing
- Software Engineering and Application Development
- Educational Media Development: CD-ROM,DVD, Web, Multimedia

### Work Experience

Independent Developer (10/1997 - Present)	<ul style="list-style-type: none"><li>• Scientific Visualization Software Development OpenGL, C, PMARCviewer developer for UNIX, PowerMacintosh Various short term W2 software development projects</li></ul>
Technoscience (10/1999 - 11/2000)	<ul style="list-style-type: none"><li>• Multiprocess Data Acquisition and Computation System SOFIA - Stratospheric Observatory for Infrared Astronomy, NASA Ames C, UNIX, socket programming, Scientific Programming (part time)</li></ul>
Sterling Software ( 5/1990-8/1997)	<ul style="list-style-type: none"><li>• Software Engineer, 3D Computer Graphics S/W Engineering</li><li>• Flight simulationS/W - UNIX, C/C++, SGI Performer 2.0, OpenGL</li><li>• Multimedia Programming, Macromedia Director: Design, CDROM, K-12</li><li>• GVS 3- General Visualization System - design and implementation of a general purpose scientific visualization data display system. Object oriented design, C-coding, IRIS GL. Code distributed through NASA.</li><li>• PMARC Viewer - Macintosh C software coding to display scientific data.</li></ul>
Dupont Imaging (1/1990 - 5/1990)	Senior Applications Engineer Scientific Visualization, Image Processing, Customer Training
Sun Microsystems, Inc (1/1989 - 12/1989)	Member of the Technical Staff Design and support in-house Graphics Standards - XGL.
Sterling Software (8/1987 - 1/1989) (6/1986 - 1/1989) (6/1984 - 6/1986)	Senior Software Engineer, 3D Computer Graphics design and programming Scientific Visualization: 3D Graphics software design and programming Design and Implement a 3D Graphics ScientificVisualization System for Spaces Sciences, NASA, Ames Research Center; C Programming Technical Manager, NAS Graphics, Numerical Aerodynamic Simulation; Install 3D computer graphics software on IRISs, CRAY-2, AMDAHL, UNIX
Brag Systems, Inc. (10/1983 - 5/1984)	Technical Manager, 2D Graphics Products GKS/VDI/DD Package Specification and Design;
ATARI (4/1982 - 10/1983)	Senior S/W Engineer - VCS Cartridge Design for Sesame Street
Computer Sharing Services (11/1980 - 4/1982)	Senior Graphics Programmer/Analyst Graphics Software Design, Graphics Device, Interface Design,
Lockheed Palo Alto Research (11/1979 - 11/1980) (9/1974 - 3/1979)	Scientist Image Processing; 3D Graphics; Technical Manager; Design Engineer Microcomputer Systems Design: Solar Maximum Mission, NASA and ESA;
Lawrence Berkeley Labs (3/1979 - 11/1979)	Staff Scientist; Microcomputer Systems Design: H/W and S/W Design; Distributed Systems Design; Some graphics programming

San Jose State University  
(Fall, 1987; )  
(Spring, 1988)  
(Spring 1977)

Instructor  
Introduction to Advanced Three Dimensional Computer Graphics:  
wire-frame, constant shading, Gouraud; Shading, Phong Shading, Splines.  
M6800 Microprocessor Workshop; Lecture: Microcomputer System Design  
fundamentals; Process exams; evaluate students

College of Notre Dame  
(1999-2002)

Instructor

- Computer Graphics - OpenGL, Graphics principles, programming
- Software Engineering - software management methodologies

United States Coast Guard  
(1965 - 1969)

Fire Control Technician, E-5  
Radar repair, operations and maintenance; Electromechanical devices  
servicing.

Computer Systems Experience  
UNIX™, Macintosh

Graphics Systems  
SGI IRIS: OpenGL, Performer 2.0; Macintosh: Code Warrior

Programming Languages: C; Flash; Studying C++  
Graphics Packages Used: OpenGL; IRIS GL,RenderMan, X11, DORE, PHIGS  
Operating Systems: UNIX SYS V, VMS, COS, UNICOS, System 9, X (Mac)  
Scientific Programming: Mathematical and Scientific Programming; FFT;  
2D/3D Computer Graphics: Single Frame Real time Animation

Scientific Visualization of: Galaxy formation; Ozone; Planetary Topologies; Panel Data;  
Temperature and Pressure variations via General  
Circulation Model; Electron Densities; Molecular Modeling

Graphics Systems Analysis/Design: Scientific Visualization, Image Processing;  
Software Design and Implementation for same;  
Large Databases for Graphically oriented information

Macintosh Experience: Macintosh Programming (CodeWarrior; C, C++);  
Advanced Graphics programming experience for the Mac;  
PageMaker; Word; Canvas; PhotoShop; PDF

Multimedia Development: Macromedia Director: K-12 Science Education  
CD-ROM Production: Macromedia Director, Lingo, QuickTime™ Production  
Adobe Acrobat™, Packaging, Manufacture

Professional Organizations - Membership

ACM - Association for Computing Machinery	(1979 - Present)
- SIGGRAPH - Special Interest Group for Computer Graphics	(1979 - Present)
-- ACM/SIGGRAPH Local Groups Coordinator -	6/1985 to 6/1988
-- Member: SIGGRAPH Education Committee -	6/1986 to -1996
-- Co-Chair, SIGGRAPH Careers Issues	6/1985 to 6/1992
-- DIRECTOR: SIGGRAPH -	7/1988 to 6/1990
-- Vice-Chair, Computer Graphics Courseware Repository	1/1991 to 1992, Co-Founder
-- Production Editor, CD-ROM Course Notes	SIGGRAPH 94, 95 Conference
. . Production Editor, CD-ROM Educators Program	SIGGRAPH 94, 95, 96 Conference
-- Chair/Founder, SIGGRAPH 95 Educators' Program	SIGGRAPH 95, founder
-- CD-ROM Production Manager	SIGGRAPH 1996
IEEE - Institute of Electrical and Electronics Engineers	(1979 - 1994)
SMPTE - Society of Motion Picture and Television Engineers	(1987 - Present)
SIGGRAPH Slide Conversion Project	2000 - present
-- convert all SIGGRAPH slides from 1979-1999 to digital form	

Present Study Activities:

- OpenGL™ programming and studies
- Scientific Visualization applications development
- Multimedia development

## Publications

For a visual view of my publications  
please visit: <http://www.srkgraphicsrsch.com>

- Conference Educators' Program, Production Editor  
SIGGRAPH 97 Educators' Program CD-ROM, August 1997 (1500)
  - SIGGRAPH CD-ROM Production Coordinator  
SIGGRAPH 96 CD-ROM Manufacture and Quality Control, Cover Design  
(6 CD-ROMs: Proceedings(1), Visual Proceedings(2), Course Notes(2), Educators Program(1)  
totalling roughly 66,000 CD-ROMS)
  - Conference Educators' Program, Production Editor  
SIGGRAPH 96 Educators' Program CD-ROM, August 1996 (1400)
  - Course Notes CD-ROM, Production Editor  
CD-ROM 1: Course Notes, CD-ROM 2: QuickTime™ movies  
ACM SIGGRAPH Computer Graphics, August 1995 (6000x2)
  - Conference Educators' Program, Production Editor, Founder & Chair  
SIGGRAPH 95 Educators' Program CD-ROM, August 1995 (1400)
  - Object Oriented Rapid Prototyping  
Computer Based Training on CD-ROM, Sterling Software, December 1994 (200, prototype)
  - Course Notes CD-ROM, Production Editor, First Course Notes CD-ROM for SIGGRAPH  
ACM SIGGRAPH Computer Graphics, July 1994 (6000 manufactured)
  - ACM SIGGRAPH Education Committee Multimedia Project, Chair and Producer  
ACM SIGGRAPH Conference Multimedia CD-ROM, July 1994 (2000 manufactured)
  - Computer Graphics Career Handbook, Second Edition  
Vice-Chair, Co-Author, Co-Editor, ACM SIGGRAPH Education Committee  
ACM SIGGRAPH Computer Graphics, February 1991 (25,000 copies)
- Careers in Computer Graphics
- Co-Author and Co-Editor, ACM SIGGRAPH Education Committee  
ACM SIGGRAPH Computer Graphics, Vol.23, No.1, February 1989 (15,000 copies)
  - A Transformation Structure for Animated 3D Computer Graphics  
Published 1981, SIGGRAPH, Vol. 15
  - Microcomputer Based Distributed Control, Master's Thesis, University of California, Berkeley  
Submitted: February 1981; Accepted: June 1981
  - Interactive Three-Dimensional Computer Graphics  
Presented 18 May 1975, VEGUS, Vector General User's Group  
Published 1975, VEGUS Conference Proceedings

## Published Imagery

- Isosurfaces of Electron Density, Published in Visual Cues, IEEE Computer Society Press, 1993, p.9-8
- Protostar Turbulence, An isopotential display of density in protostar turbulence  
Published in the 1989 SIGGRAPH Slide Set
- Butterfly in Motion - 4 scenes and Pattern Generation 1  
Computer Graphics by John Lewell, 1985
- Superstar, A 3D wire-frame object depicting a star-like object.  
Published in the 1979 SIGGRAPH Slide Set ; "Digital Design", November 1981
- FFT2D, A graphics display of the output of a Fast Fourier Transform,  
Published in the 1981 SIGGRAPH Slide Set and Poster
- Butterfly in Motion  
A 3D wire-frame object depicting a butterfly in flight;  
Published in the 1981 SIGGRAPH Slide Set and Poster

## Published Software

GVS - General Visualization System, NASA Ames  
PMARCviewer™- Scientific data analysis program