

Bruce J. Bell

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<http://www.ugcs.caltech.edu/~bruce/>

Programming Skills

- **expertise:**
algorithms, system design,
quantitative programming,
computer graphics,
data/image compression,
binary data formats
- **languages:**
C/C++, Perl, Haskell, assembly,
graphics shader languages, Java,
Basic, Fortran, Pascal, Postscript,
shell scripts
- **markup/presentation:**
HTML, XML, CSS, PDF

Sysadmin Skills

- **expertise:** setup, administration,
and maintenance of cloud-based
services
- **Unix:** SunOS/Solaris, HP-UX, SGI,
AIX; heterogeneous clusters;
system scripting
- **Linux:** Ubuntu, Red Hat, Debian;
Apache, Samba, FTP services

Additional Skills

- analog and digital electronics
- semiconductor processing lab
- drafting, machine tools

Programming Experience

- Blue Shift, Inc. Nov '07 – Feb '09
Implemented full-screen effects for console video games
(Midway's Ballers and Blitz – The League 2)
- NVIDIA Jan '06 – Sep '06
Provided testing support for compiler group
- Telemetry Broadcast Corp. Aug '98 – Dec '99
Wrote telemetry software for Shuttle Radar Topography
Mission (SRTM – STS99)
- Caltech — Hum/SS dept. Dec '94 – Sep '96
Wrote interactive client-server system for experimental
economics; implemented matrix and linear programming
algorithms
- Caltech Hum/SS dept. '87 – '88
Wrote interactive game tree editor
- Caltech summers, '86 and '87
Programmed for hypercube parallel computer project

Sysadmin Experience

- Google Site Reliability Engineer Jan '10 – Jan '11
Managed critical production services
- Caltech ITS dept. Dec '99 – Jun '02
Unix sysadmin for Caltech IT services dept.
- Caltech CNS dept. Jan '92 – Jun '93
Assistant sysadmin for Caltech Graphics Group

Additional Experience

- Rhythm & Hues Oct '96 – Sep '97
Game designer (on SGI workstation, for Sony Playstation)
- Caltech, under Dr. Y. C. Tai summer '91
Research: micromachined infrared detectors

Education: California Institute of Technology

- Physics major (work also in electrical engineering, mathematics)
- left with senior status