

# David Fifield

Programmer

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I am a programmer who works on free software. I have experience with system and network administration with GNU/Linux.

## Skills

### Programming languages

My favorite programming language is ANSI C, and that is the language in which I am most proficient.

I have a few years of experience with Python, which I like for general-purpose programming.

I have some knowledge of and experience with C++ and the Standard Template Library, Java, Lua, Scheme and other Lisps, Perl, and PostScript.

### Operating systems

I have ten years of experience working with GNU/Linux. I have well-developed general Unix skills. I administer a GNU/Linux system that provides web, mail, and other services.

I created my own GNU/Linux distribution.

### Other technologies

I have experience with the advanced use of GNU Make.

I am familiar with the Bazaar, Subversion, and CVS revision control systems.

I have written programs with OpenGL.

I have experience with XML and different ways of processing it.

I have a little experience with SQL-based relation database management systems, specifically MySQL.

### Human languages

I have excellent English skills.

I have functional Spanish skills, having had two years of college-level study.

## Accomplishments

### Leadership

I am an Eagle Scout.

I completed the Wood Badge adult leader training course.

I have served on staff in a leadership capacity at the Big Horn Leadership Training Course for eight years, including in the position of Scoutmaster, the senior adult position.

### Programming

I have been an active developer on the Nmap security scanner.

I wrote the embedded firmware for two generations of a microcontroller-based high-altitude scientific device as part of the DemoSat project.

A current list of my free software programs and brief web pages for each are available on the web at <http://www.bamssoftware.com/software/>.

## Education

### Metropolitan State College of Denver, August 2004–December 2007

I graduated summa cum laude with a B.S. in computer science and mathematics in December 2007. My grade point average was 4.0.

#### Awards

President's Award, the highest honor for a graduating senior.

President's Academic Achievement Award (twice, \$2,500 total grants).

Colorado Scholar (\$1,000 grant).

## Work history

### National Earthquake Information Center, May–August 2005

I worked as a programmer for the USGS during the summer of 2005. I worked on tools for accessing and displaying seismic and inventory data from the Advanced National Seismic System. I set up a CVS repository and modified several applications to work with SSL.

### Metropolitan State College of Denver, January–May 2007

I was the tutor for the computer science department, teaching Java and elementary computer science to other students.

### Google Summer of Code, May–August 2007

I was selected to work on the Nmap security scanner for the Summer of Code in 2007. I worked on new features and enhancements, fixed bugs, and wrote documentation, as well as providing support on the public mailing list. I got a positive evaluation and completed the program successfully.

### Nmap security scanner, September 2007 to present

After the summer of code I continued working on Nmap as a paid developer. My major accomplishments have included an overhaul of the host detection engine, complete documentation of the Zenmap graphical frontend, and the addition of fixed-rate scanning. I served as a Summer of Code mentor in 2008, managing three students in projects to improve the program.

## Publications

“Inertial measurement and realistic post-flight visualization.” Proc. of the Colorado Space Grant Consortium Undergraduate Symposium. 2007.

“Zenmap GUI Users' Guide,” a chapter in the book *Nmap Network Scanning*.

The latest version of this document is at <http://www.bamssoftware.com/david/resume/>.