Ben Lipkowitz

fennfoot@gmail.com

http://fennetic.net/portfolio/

(703) 343-5730

Skills (most confident first in each category)

Web/Networking:
search, ssh, wiki, HTML, CSS, django, apache, mod_rewrite, TCP/IP, DHCP, DNS, SPF, firewalls, NAT, CGI, cherrypy, template toolkit, mason, tcpdump, ARP, spamassassin, mailman, netapp

Unix/Linux:
rtfm, coreutils, Debian, Ubuntu, screen, apt, sed, NFS, grub, RedHat, rtai, OpenVZ, ntpd, MySQL, yum, iptables, slocate

Programming:
Python, vim, git, bash, C, Perl, CVS, svn, gcc, make, rs274 g-code, C++, Lisp, postscript

Libraries:
yaml, graphviz, cairo, opencascade, opengl

Office:
typing 120wpm, vector graphics, spreadsheets, graphing, percussion maintenance

Laboratory:
sterile techniques, colony isolation, tissue culture, agarose gels, PCR, notebook-keeping, weighing, photospectrometry, titration, immersion microscope, hematocytometer, distillation, column chromatography, southern blot, NEBlot-phototope, gel extraction, DNA sequencing, sequence alignment

Electronics:
AVR microcontrollers, arduino, circuit testing, parts procurement, circuit layout, schematic capture, H-bridge, SPI, USB, i2c

Manufacturing:
inventory management, hand tools, circuit board fabrication, soldering, lathe, mill, measuring, metal casting, industrial automation, pneumatics, carpentry, MIG, TIG, arc, plasma, CNC, fiberglass, resin casting, oxyacetylene, papercraft

Languages:
English, Spanish, Japanese

Formal Education

Microbiology 2000-2003:
Indiana University - Bachelors of Science, "with distinction" (GPA 3.72)
Studied horizontal gene transfer between plant mitochondria of different species.

Biology:
molecular genetics, molecular biology, organic chemistry, bacteriology, immunology, virology

Math:
linear algebra, calculus, statistics

Informal Education

Engineering 2001-2008:

units, actuators, manufacturing processes, control theory, artificial intelligence, space tethers, turbines, rockets, CAM, CAD, kinematic design, self-replicators, rapid prototyping

Experience

EMC2 project 2005-2008:

Open source developer; wrote a stewart platform simulator, investigated various improvements to motion queueing and IPC, bugfixes, testing, significantly improved documentation and wiki.

the emc-developers mailing list #emc-devel on irc.freenode.net, or board@linuxcnc.org

Datarealm, Inc. 2007 May-Nov:

Backend Engineer; resolved database, spam, and Linux server automation issues. Created a new spam filter configuration interface for employees. Documented Perl infrastructure from 1994. Assisted technical support department in finding solutions.

August Wohlt wohlt@isidore.net

University of Texas Automated Design Lab 2009 Jun-Aug:

Summer Research Experience. Put in place subversion, wiki, mailing list, hostnames, backups etc. and helped other staff learn to use them. Designed formats for representing manufacturing processes and part compatibility. Documented disassembly procedure for various consumer items. Played with virtual Legos.

Matt Campbell 512-232-9122 mc1@mail.utexas.edu Bryan Bishop 512-203-0507 kanzure@gmail.com

OmniVision Technologies 2010 Jun-Aug:

Quality Assurance Intern. Built quality assurance database and interface in Django. Tested webcam compression algorithms for visual artifacts. Wrote various helper utilities for chip designers.

Jeff Hsieh jhsieh@stanfordalumni.org Ben Hue-ban Lan 408-973-8356 benh_6_lan@yahoo.com

Ignite Gaming Technologies 2010 Jun-Aug:

Prototype Technician. Built several iterations of videogame controller to specification. Designed and documented electronic circuit board and layout for mass manufacture.

Jimmy Li jimmy@ignitegt.com