Jesse E.I. Farmer

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Purpose To develop technologies which intelligently automate or simplify complex tasks.

EDUCATION University of Chicago, Chicago, Illinois

B.S., Mathematics with Honors in the College and Physical Sciences Division

Dean's list 2002-2006, 3.7/4.0 GPA

EMPLOYMENT **OpenHive**, Menlo Park, CA

http://www.openhive.com

Founding Engineer

OpenHive is a website designed to foster genuine social interaction through the sharing of media. Responsible for front-end development, with a focus on PHP and Javascript.

- Wrote SWAF, a lightweight framework based upon MVC principles, to aid in rapid, structured development of OpenHive components.

NSIT Network Based Services, Chicago, Illinois

http://nsit.uchicago.edu

 $Student\ programmer$

Winter 2006 - Spring 2006

Spring 2006 - Autumn 2006

NSIT Network Based Services is the primary provider for critical network infrastructure at the University of Chicago, such as LDAP and email services. Responsibilities range from upkeep, enhancement, and documentation of existing services to testing and implementation of new services.

- Developed NBSIMMonitor, a small application which monitors various components of the University of Chicago's Jabber server, such as database connectivity and transport status. It is written in Java using Jive Software's Smack API.
- Developer for a hitherto unnamed set of shell scripts designed to facilitate automated deployment and configuration of RHEL machines within Network Based Services, particularly virtual machines hosted using VMware server products.

NSIT Web Services, Chicago, Illinois

http://webservices.uchicago.edu

Assistant web developer

Winter 2005 - Winter 2006

NSIT Web Services is the University of Chicago's primary provider of both internal and public-facing web services. Responsibilities ranged from tuck-pointing smaller sites to designing and implementing web applications from the group up for use in the wider University community.

Residential Computing, Chicago, Illinois

http://rescom.uchicago.edu

Computing assistant

Autumn 2003 - Winter 2005

Residential Computing (Rescom) is general computing department for the University of Chicago's Residence Halls & Commons and Office of Undergraduate Student Housing. Responsibilities varied from mundane tasks such as diagnosing hardware problems to designing and maintaining complex software to manage infrastructure and student-facing services.

EMPLOYMENT, CONT.

- Developer and maintainer for *brutelogin*, an alternative Cocoa-based login system for Mac OS X, written in Objective-C and bourne shell script.
- Developer for *Chopin*, a PHP/MySQL enterprise management system used extensively for day-to-day and central administrative tasks in the University of Chicago's Residence Halls and Commons and Office of Undergraduate Student Housing
- Creator and maintainer of *Rescom Windows Installation CD*, an automated Windows installation CD which partitions, formats, and installs Windows on a computer preconfigured to Rescom specifications. See http://rescom.uchicago.edu/tech/disk/rhc-winxp.php for a partial description.
- Creator and maintainer of *RHCUpdate*, a server-side system to deploy software, configure system settings, and install updates to Windows and Macintosh computers with no client-side interaction

EXPERIENCE

Computational Linguistics

http://home.uchicago.edu/~farmerje/code/

The field of computational linguistics (or natural language processing) affords me the the opportunity to synthesize my interests in mathematics, linguistics, and computer science. Further details, including code and technical descriptions, can be found at the above URL.

- With Michael Y. Erlewine (mitcho@uchicago.edu) developed an extensible system for authorship identification called EAI, written primarily in Python.
- Implmented a handful of classic algorithms in C++ to try to determine word and morpheme boundaries.

Gaim project

http://gaim.sf.net

Contributor 2002-2003

Contributed regularly to the open-source Gaim project, a multi-platform multi-protocol instant messaging client. Implemented missing portions of the Yahoo! instant messaging protocol, particularly those relating to privacy, in addition to submitting general patches for additional features and bug fixes. Gaim is written primarily in C and GTK+.

Mathematics REU, University of Chicago, Chicago, Illinois http://www.math.uchicago.edu/~may/VIGRE/VIGREREU2005.html

Participant Summer 2005

Accepted into and participated in the University of Chicago mathematics REU (research experience for undergraduates) program. Under the guidance of graduate students and professors studied algebraic curves and Fucshsian groups, and did research into the abelian sandpile model for specific classes of graphs. Spent two weeks teaching basic calculus and introductory Java programming in the SESAME program to middle-school teachers.

SKILLS

- Languages: Intermediate to advanced knowledge of C, PHP, bourne shell, and XHTML/CSS. Intermediate knowledge of Objective-C, Ruby, Python, Coldfusion, and SQL. Passing knowledge of C++, Perl, and Java.
- APIs: Cocoa, GTK+, and some experience with Win32 APIs.
- **Technologies**: Experience with Apache, MySQL, MS SQL, Ruby on Rails, AJAX, Subversion, and VMware products.
- Environments: Extensive experience with Linux, Windows, and Macintosh environments.