

Joe Blaylock

Objective To extend human capabilities in meaningful ways.

- Skills**
- Clear speaking and writing, critical thinking, problem-solving
 - Python, C, Java, Scheme, Bash, Perl
 - Neural networks, statistical classification and feature extraction, some experiment design

Professional Experience Scientist 2008 - Present
Cataphora, Inc. Redwood City, CA

- Researching methods for applying human behavioral models to continuous monitoring
- Developing software prototypes and data visualizations (Python, Java)
- Connecting colleagues to new people and ideas in a just-in-time fashion

Part-Time Knowledge Base Systems Administrator 2006 - 2008
Indiana University Bloomington, IN

- Maintained documentation to provide historical context for new sysadmin

Knowledge Base Systems Administrator 2002 - 2006
Indiana University Bloomington, IN

- Reduced costs and improved reliability by emphasizing Free and Open Source Software
- Migrated systems from Solaris and HP-UX to clusters of Linux hosts
- Developed new systems administration tools for Linux and Solaris (Python, Bash)
- Developed automated host installation tools based on Debian preseeds and custom packages
- Held ultimate responsibility for systems in use by 100,000 users on 8 campuses

Customer Support / Training Coordinator 2001
Linux NetworX Salt Lake City, UT

- Provided Beowulf cluster support: Kernel builds, Developer toolchain, General Linux help

Software Development Co-Op 1999 - 2001
Cinergy Communications Evansville, IN

- Developed web-based data display site; Imported client data into MySQL (Perl, MySQL)
- Developed new systems administration tools for Solaris servers (Perl, csh, Bash)
- Extended in-house ticketing system to improve call center throughput (Perl, MySQL)

Education BS Computer Science 2002 - 2007
Indiana University Bloomington, IN

- Minor in Cognitive Science
- 3.57 GPA; Graduation with Distinction; Dean's List; Computer Science department honors

Academic & Research HPC Undergraduate Cluster Challenge Team Captain 2007

- Managed five others to build, install and run 9-node HPC cluster with 30-amp power budget
- Acted as Linux guru and builds-related "go-to guy" for team

Evolved Continuous-Time Recurrent Neural Network-Driven Agent (class project) 2007

- Implemented CTRNN, hill-climbing search algorithm, and agent model in Python with NumPy
- Evolved agent capable of "seeing" and intercepting a target with a foveated eye

Naïve Bayesian Foreign-Word Classifier (class project) 2006

- Implemented a naïve Bayesian classifier for strings using Python
- Trained classifier to differentiate phonetic Russian and Polish words

Publications "Arts and WebWatcher", *SysAdmin*, Jun 2006
"A Brief Introduction to Debian Preseeds", *SysAdmin*, Apr 2006