

Colin Copeland
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Experience

- Member/Owner** Fall 2007 – present
Cactus Consulting Group, LLC Chapel Hill, NC
- Established a computer consulting business with three partners focusing in database enabled websites.
- Programmer** May 2007
Earlham College, Computer Science Department Richmond, IN
- Developed software to interface with **YSI** sensors for a **KECK Foundation** funded research project focusing on metals in the environment.
 - Developed general purpose data logger (written in Perl, Python and Django) and protocol to allow embedded field systems to communicate with server.
- Co-founder and Programmer** Summer 2006 – 2007
Earlham Energy Awareness Project (EEAP), Earlham College Richmond, IN
- Developed a Ruby on Rails website as an incentive program to increase energy awareness of students living in campus housing.
 - Received funding to develop on-campus monitoring system from proposed *EEAP Expansion: Real Time Monitoring*.
 - Developed circuit and kernel module to monitor power consumption.
- Web Programmer** Summer 2006
Oberlin College, Office of College Relations Oberlin, OH
- Programmed in PHP, Perl, HTML, and CSS to maintain content, develop blogs, and create scripts to ease content management.
- Main Programmer/Senior VP** 2004
Blufire Software Ohio
- Co-founded Macintosh software company that developed small utilities and games.

Education

- Earlham College**, Richmond, IN 2003 – May 2007
- B.A., Computer Science, May 2007
 - *Thesis:* Economical Real-Time Monitoring of Power Consumption
 - Researched and developed a cheap, cost-effective automated system to provide frequent feedback and convey consumption information to facilitate energy conservation and awareness.
 - Developed on small embedded systems running Linux and built signal conditioning circuits.
 - Programmed kernel modules to poll sensors at discrete intervals.

- *Classes:* Algorithms & Data Structures, Principles of Computer Organization, Theory of Computation, Ford/Knight Research Project (PHP project), Operating Systems, Networks & Networking, Database Systems, Software Engineering, Independent Study (Database project), Senior Seminar

Academic Experience

Software Engineering, Computer Science Department Summer 2006 – Fall 2006

- Developed data mining, processing, and presentation system named scrAPI.
 - *Data:* Developed programming interface to generically search and process data on websites.
 - *Presentation:* Created presentation interface that allowed users to view “scraped” information on a Google map.

Sustainable Systems, Environmental Programs Summer 2006 – Fall 2006

- Setup solar hot water heater and water pump powered by PV panel.
- Designed with team of 3 students and professor.

Hardware Interface Project (HIP), Computer Science Department 2006 – May 2007

- Worked with embedded systems running Linux and developed software to interface with wind speed and direction sensors.
- Cross-compiled software to run on ARM architecture.

Skills

- *Languages:* Python, SQL, C, C++, PHP, HTML, CSS, JavaScript, L^AT_EX, Perl, Java,
- *Web Frameworks:* Django, Ruby on Rails
- *Databases:* PostgreSQL, MySQL
- *Applications:* Adobe Photoshop, Inkscape, Apple Final Cut Pro
- *Platforms:* MacOS X, GNU/Linux (Debian), Embedded Linux Systems

References

Available upon request.