

John McDowell

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SUMMARY

- Over five years experience designing, building, and maintaining computer software and hardware both professionally and for the internet community.
- Highly self-motivated—taught myself most of what I know on my own time. Love working with technology.

FORMAL EDUCATION

- **Duke University.** Durham, NC. Expected graduation May 2005.
 - B.S. in **Computer Science**, B.S.E. in **Electrical and Computer Engineering**, and a minor in **Economics**.
 - **Computer Science GPA 3.9 / 4.0** – Overall GPA 3.4 / 4.0
 - **Computer Science Courses:** 100 (**C++**, **Data Structures**), 104 (**C**, **MIPS Assembly**, Hardware implementation), 108 (**Java**, **C++**, **Design Patterns**, **Object-Oriented Methodology**), 110 (**Operating Systems**), 120 (Digital Logic), 130 (**Algorithm Analysis**), ECE195 (**Embedded Computing**), 214 (**Networking**, **Distributed Systems**), and ECE251 (**Advanced Digital System Design**, **VHDL**).
- **St. John's School.** Houston, TX. 1988 - 2001.
 - 1580 – SAT I.

PROFESSIONAL EXPERIENCE

- **Volt** (Student Consultant for Microsoft, September 2003 - Present) – Working closely with Microsoft's University Relations to build student and faculty awareness of Microsoft solutions through Tech Talks, programming competitions, and other campus initiatives.
- **Motorola** (Web Developer, May - August 2003) – Designed and developed .NET technologies for Motorola's corporate intranet. Worked in a team of eight to strategize tools and solutions to increase efficiency in the police and fire communications department.
- **Noble Drilling** (Application Programmer, May - June 2002) – Programmed Excel applications using Visual Basic. These programs are now used by drillers to model well behavior in the field.
- **Noble Drilling** (Research Engineer, May - June 2002) – Researched and designed an angular position sensor for use in an oil field application. A prototype based on my design is currently being tested on several offshore oilrigs.
- **Maurer Engineering** (Assistant to the Network Administrator, July - August 2000) – Built and repaired computer hardware; handled software and maintenance issues.
- **Freelance Web Design** (Self-employed, 1998-2000) – Designed a number of websites including an e-commerce store with over 500 products. CGI scripting written in PERL displayed product database and processed credit card orders.
- **Computer Construction** (Self-employed, 1998-1999) – Built and sold computers to a local business and through eBay.

INDEPENDENT PROJECTS

- **Designing and implementing a campus-wide, web-based system** to monitor the status of Duke's 400+ laundry machines via the internet using Microsoft's .NET platform. Personally designing an Ethernet compatible data acquisition boards to interface with a web service layer. The project is partially funded by Microsoft Research.
- **Authored a basic text editor** for use on an **embedded Linux hardware** device that is currently in use several countries (car stereo application).

COMPUTER SKILLS

- **Proficient in C++, C, and Java** and have significant experience with the .NET platform, C#, VB.NET, and SQL.
- Experience with **microcomputer programming** and **computer hardware design** (VHDL, CAD Tools).
- **Experience leading midsize (8,000+ LOC) software projects.**
- Solid grounding in writing **robust, maintainable, object-oriented code** in both **Windows** (Visual Studio .NET) and **UNIX** environments.

ACTIVITIES

- **Personally teaching a for-credit course on .NET development** to interested students this semester.
- **President**, Duke Microsoft Users Group.
- Continued to work with my Boy Scout Troop after receiving the rank of **Eagle Scout**.
- Duke University club **water ski team**.
- **Dean's List** 3 of 5 semesters; **Phi Eta Sigma Honors society**.