

# Jeffrey Sharkey

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## Objective

To impact people everywhere with software solutions that change how they interact with their world.

## Education

MS in Computer Science at Montana State University (MSU). *(August 2006-May 2008)* My thesis applies Artificial Intelligence to solve wireless network design problems. In-depth coursework in Artificial Intelligence, Wireless Networks, and Parallel Computing. Overall GPA 3.35.

BS in Computer Science at the University of Minnesota Duluth (UMD). *(September 2001-May 2006)* In-depth coursework in Artificial Intelligence, Networks, and Graphics. Overall GPA 3.17.

## Skills

Extremely skilled in a variety of programming languages including C++, C#, Python, Java SE, and PHP. Excellent knowledge of SQL, XHTML, CSS, JavaScript, and XML.

Extensive experience with Gentoo Linux, Debian Linux, and Windows XP. Also experienced with Apache, BIND, MySQL, Subversion, and LaTeX.

## Conference Papers

J. Sharkey and D. Galarus. "Radio Network Design for Rural Intelligent Transportation Systems using Artificial Intelligence." Transportation Research Board 2008 Annual Meeting.

## Awards and Appointments

Winner of 2008 Google Android Developer Challenge. My application compares pricing across dozens of storefronts, <http://scan.jsharkey.org/>. Awarded \$25,000 to continue development.

Received 2007 Outstanding Student of the Year Award from the US Department of Transportation's University Transportation Center (UTC) at Montana State University.

Awarded a Graduate Research Fellowship from the Western Transportation Institute (WTI) at Montana State University. *(August 2006-May 2008)*

Winner of 2005 Digi-Key Collegiate Programming Contest. I was a Java programmer on our team of four from UMD. Our team was awarded \$3800 and a traveling trophy.

President of Association for Computing Machinery (ACM) Student Chapter at UMD. *(October 2003-May 2006)* Planned and executed chapter events including Linux Installfest and guest speakers.

Four-time winner of the UMD Student Web Contest. All recipients were required to meet strict W3C XHTML and CSS standards.

Over for Work Experience →

## Work Experience

*MSU-Western Transportation Institute* (August 2006-Present)  
*Graduate Research Assistant*

Applied Artificial Intelligence to design regional wireless networks as part of thesis research. Current best results are bounded within  $1.35 * \text{optimal}$ .

Wrote the GPL C++ libprop radio propagation library which tests if radio links are possible, <http://libprop.jsharkey.org/>.

Built several Google Maps mashups to analyze radio signals for a Department of Homeland Security project.

Lead a team to design and build C# software for first responders. Enables anyone to share maps, pictures, and markup across a mesh network.

Wrote PHP library to parse forecasts from National Weather Service and render images for Google Maps overlays. Contributed back to the degrid open-source community.

Deployed a corporate wiki and helped write proposals and reports for various projects.

*Private Technology Group* (October 2006-Present)  
*Systems Administrator*

Created a web hosting business with team of two friends. We use Gentoo, Apache, BIND, and Squid to serve over 4 million visitors per month.

Wrote a search engine in PHP and MySQL to help people find fresh new independent music.

*UMD-Computer Science* (November 2002-May 2005)  
*Undergraduate Research Assistant*

Wrote a Java tool that visualizes data from a 40GB MySQL database of historical traffic data.

Designed a Java system to detect weather sensor malfunctions using machine learning.

*UMD-Computer Science* (September 2004-January 2006)  
*Undergraduate Teaching Assistant*

Provided weekly lab support for 25-40 students in Computer Science courses.

*ABE Environmental Systems* (October 2004-August 2006)

Programmed and deployed embedded environmental control networks using Java-based tools. Administered a Windows network of 12 desktops and 2 servers.