

Thomas M. Whipple

Summary Computer scientist and programmer with 10+ years experience. Possesses a strong mathematical background and has practical experience solving real world problems.

Primary Languages: C, C++, Objective C, Java, Perl, SQL, Matlab

Experience **Founder, Smartovation Technologies** **August, 2009 - Present**

Created Smartovation Technologies to develop and market apps for the iPhone and web. Provides software development services for the iPhone and embedded systems.

Partner, Walki-Talki.com LLC **February, 2009 - Present**

Expanding Walki-Talki.com's catalog of audio walking tours to the iPhone and all the other responsibilities associated with growing a business:

- Developed and is maintaining an interactive, map based tour app for the iPhone.
- Market Walki-Talki.com website to drive traffic and increase sales. Measure progress using web analytics and sales data analysis. Write and distribute press releases.
- Produce audio tours: edit scripts and hire voice over actors.

Computer Engineer, NAVAIR (US Navy) **September, 2007 - July, 2009**

Worked on a variety of projects related to radar applications:

- Developed of automated data analysis & visualization tools for RF signal analysis in support of hardware in the loop testing.
- Developed a maximum likelihood matching algorithm to automatically classify signals from an incomplete set of observations.
- Analyzed and tested an existing operational flight program (OFP), to ensure correct functioning of the device. OFP software is written in Ada and C, running on a VxWorks platform. Required use of RF test equipment and software.
- Successfully proposed a research topic and oversaw it's progress through the Small Business Innovation Research (SBIR) program up to and including the Phase I vendor selection.
- Served as Lead Technical Point of Contact (TPOC) for a Small Business Technology Transfer (STTR) contract involving wide band digital receivers.
- Developed a real time interface control software for a custom built RF signal generator as part of a hardware in the loop (HiL) simulation. Software was written in C for a VxWorks platform and required debugging and modifications of vendor supplied VxWorks device drivers using logic and spectrum analyzers.

Graduate Technical Intern. Intel Corp. **May 2006 - August 2006**

Contributed to Linux desktop software as an Intel employee while in graduate school:

- Designed and created an open source test suite for the 1.0 release of xdg-utils, which are designed to provide a uniform way to install & manage applications on various Linux distributions.

Software Engineer, Nistevo Corp. (now part of Sterling Commerce) 2000 - 2003

Contributed to several projects as Nistevo (a logistics collaboration software as a service) completed it's web application and deployed to it's initial customers:

- Developed a new Java/XML based test framework for QA in support of Xtreme Programming methodology.
- Automated several build automation & test tasks in support of product integration.
- Led development of Brio/Hyperion SQR report framework for the initial deployment of a reporting portal. Supported development of Oracle SQL views.
- Administered SeeBeyond eGate enterprise integration package during the Nistevo's go-live period. Created automated monitoring and recovery tools.

Network Administrator, Znet Telecom 1997 - 2000

Served as a lead network & system administrator for a small rural Internet Service Provider,

- Specified & coordinated installation of WAN lines delivered by telecom carriers, then configuring network equipment.
- Delivered new technologies to customers when they became available. (e.g. DSL, VoIP & WiFi).
- Maintained servers required to run an ISP.
- Custom web development.
- Consulted to customers.

Education University of Minnesota-Twin Cities – MS, Computer Science 2005 - 2007

- Studied computer vision, machine learning and robotics.
- Thesis project involved multi-resolution classification of contours formed by shape outlines. Contours are represented with a B-spline and decomposed with a wavelet analysis.

University of Minnesota-Twin Cities BS, Mathematics 2003 - 2005

- Undergraduate thesis was a survey of size functions. (Size Functions were developed to recognize occluded objects in images.)
- Led race strategy for the Solar Vehicle Project team. Developed much of the embedded software to control the car. Decision support software incorporated a solar energy model to assist race time decision making. The Minnesota team was a very close runner-up to a team with a budget estimated to be 5 times larger.