# **Thomas Feeney**

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## **Objective**

Currently not seeking employment.

Special interests include embedded system design, systems integration, PCB design, and autonomous vehicles.

Relevant Coursework

**Electromagnetic Fields** 

Digital Design and Computer Organization

Differential Equations and Transforms

Microprocessors and Intelligent Machine Design

Computer Aided Design and Design & Manufacturing

#### Education

Bachelor of Science in Electrical Engineering Minor in Mathematics University of Florida, Gainesville, Florida Anticipated Graduation: Aug 2009 Current GPA: 3.11/4.0

#### Research

### SubjuGator

I am the leader of the 2009 SubjuGator Team, and was co-leader in 2009. I designed a 4-layer, 14 port serial to USB router PCB, written code in C++ and C# to manage the many sensors (Doppler velocity log, high-speed cameras, digital compass, inertial measurement unit), maintained the operating system and programming environments, and lead the mechanical design of the vehicle. I was a significant member of the 2007 Team.

## Center for Intelligent Machines and Robotics (CIMAR)

I designed a custom computer chassis for the 10 dual-core computers located in the back of the Team Gator Nation autonomous car. I also ported a communication software library for the Joint Architecture for Unmanned Systems (JAUS) framework from Linux to Windows.

## Machine Intelligence Lab (MIL)

I have been the Network Administrator for MIL since 2005. I am primarily responsible for maintaining an Apple XServe server with web, mail, domain, and file share services, and am currently transitioning the server to a 16-core server with four Linux and Windows virtualized servers. I manage a Windows 2008 Server for SubjuGator, which runs Subversion version control system, file share services. I administer and keep running all of the computers (15) in the lab.

### Network-Centric GPS Sensor for Autonomous Vehicles

My senior design involved turning an OEM GPS module into a network-centric smart sensor for autonomous vehicles. A webserver, JAUS service, and the Decentralized Software Service Protocol (DSSP) were implemented on an 8-bit microcontroller.

## Sir Vide surveying robot

During the summer of 2007, I designed a laser surveying robot with camera and compass feedback.

#### **Employment History**

Electrical Engineering Internship, August 2008 – December 2008

Evaluated test procedures for electronics subsystems, designed an automated test fixture, preformed system trade studies Lockheed Martin Maritime Systems and Sensors, Riviera Beach, Florida

Lightning Research Lab Assistant, May 2008 – August 2008

Established lightning monitoring station and prepared conference presentations for the Lighting Research Laboratory. University of Florida, Gainesville, Florida

Integrated Product and Process Design Engineer, January 2008 – May 2008

Hired by the University to implement a position/orientation microcontroller for a robotic arm.

University of Florida, Gainesville, Florida

Information Technology Internship, May 2004 - August 2004

Administered computers and network on a 5000+ node network for a national healthcare company.

Sheridan Healthcare Corporation, Sunrise, Florida

## **Activities and Achievements**

IEEE National Member, 2003 - Present

AUVSI Student Member, 2007 - Present

Boy Scouts of America, 1992 - 2008. Earned the rank of Eagle Scout at the age of 13.

National Speleological Society, 2003 - Present

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