

# Joshua W. Hulst

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## CONTACT INFORMATION

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<http://jhulst.com>

## PROFESSIONAL EXPERIENCE

**MichiganLabs**, Grand Rapids, MI

*Lead Architect and Partner*

**November 2010 - Current**

- Provide technical oversight of five person development team
- Discover client needs and design application to meet requirements
- Design and architect API and systems integration between server and mobile clients
- Develop for Android (Java), iOS (Objective-C) and Web/Backend (Python)

**GE Aviation Systems**, Grand Rapids, MI

*Software Engineer*

**May 2011 - April 2013**

- Graduate of the Edison Engineering Development Program
- Architect and develop computing system under R&D for unmanned air vehicle
- Provide integration support at customer site
- Develop real-time embedded systems under DO-178B
- Lead eight person team for flight simulator competition
- Write and update software project documentation

**Gordon Food Service**, Grand Rapids, MI

*Software Engineering Intern*

**May 2006 - September 2008**

- Implement upgrade of project forecasting tool using Agile development
- Design and develop internal application using Enterprise Java
- Architect and implement database schema using SQL and Oracle

## TECHNICAL SKILLS

**Programming:** C, HTML, Java, Javascript, Objective-C, Perl, Python, SQL, Unix Scripting

**Tools:** AngularJS, Flask, Git, Linux, MySQL, PostgreSQL, Subversion

## ACTIVITIES AND RESEARCH

**Denial of Firewalling – Attacks and Defenses**

- Design tests to stress and measure multiple firewall implementations
- Discover internal algorithms to exploit weaknesses
- Create method to fingerprint firewall implementation
- Tests written in Perl, C and Bash

**Cyber Defense Competition at Iowa State University**

- Lead team of five students from Grand Valley State University
- Design and implement sample corporate computer infrastructure
- Participate in day-long competition where network is attacked by industry experts

## EDUCATION

**Michigan State University**, East Lansing, MI

**August 2009 - May 2011**

- M.S. of Computer Science and Engineering
- Thesis: *Denial of Firewalling – Attacks and Defenses*

**Grand Valley State University**, Allendale, MI

**August 2006 - April 2009**

- B.S. of Computer Science with Honors
- Completed four year degree in three years
- Honors Thesis: *Analysis of Memory Dumps in Relation to Voice over IP*
- Senior Project: *Shelljoust: An Exploration of Computer Security*