
Education: Electrical / Computer Engineering

Harvard University – Cambridge, Massachusetts (September 2009 – present)

Degree: SM, emphasis on Electrical Engineering

Graduation Date: May 2013

4.0 Cumulative GPA

A portion of coursework being taken at Massachusetts Institute of Technology (MIT)

Applicable Coursework:

- Topics in mixed-signal ICs and Systems
- Power Electronics

Northern Arizona University – Flagstaff, Arizona (August 2004 – May 2008)

Degree: BS in Electrical Engineering, Computer Engineering Emphasis

Graduation Date: May 2008

3.96 Cumulative GPA

Honors and Awards:

- Applied for and was awarded a NASA Space Grant (a research grant).
- Applied for and was awarded a Hooper Undergraduate Research Award (a research grant).
- Received several awards for research I presented at Northern Arizona University's "Celebration of Undergraduate Research Day" symposium.
 - April 2007: tied for 1st place for the electrical engineering awards.
 - April 2008: earned a 3rd place award for a multi-discipline, general engineering category.
 - April 2008: earned the only Phi Kappa Phi (PKP) award available to all science-related disciplines (award was given without regard to Phi Kappa Phi membership).
- Degree Honors: Summa Cum Laude
- Science Department scholarship
- John and Valerie Seeger scholarship
- John Reske Memorial scholarship
- Wayland Educational Foundation scholarship
- Engineering College Dean's List

Organizations:

- Phi Kappa Phi Honor Society member
- IEEE member

Applicable Coursework:

- VLSI Analysis and Design
- Advanced VHDL Digital Design
- Embedded Control Systems
- Signal Processing – FIR & IIR Filters

Brigham Young University – Provo, Utah (August 2001 – May 2002)

Major: Electrical and Computer Engineering

3.76 Cumulative GPA

Honors and Awards:

- Admitted to professional program
- Anthony M Burns scholarship

Studies / Activities / Awards:

- Physics and Electromagnetics

Academic Research

Hardware Accelerator Test Bench for Error-Correcting Algorithms

Northern Arizona University (January 2007 – May 2008)

Mentor: Dr. Elizabeth Brauer

Research:

- Research and implementation of FPGA-based pseudo-random number generators (PRNG) and low-density parity check (LDPC) error-correcting code (ECC) algorithms.
- Awarded two grants to perform this research, and presentation of results won two additional awards.

Frequency Synthesizer – Senior Design Project

Northern Arizona University (August 2007 – May 2008)

Mentor: Dr. Nazmul Islam

Research:

- Developed circuitry and microcontroller code as part of a team-based frequency synthesizer project.
- Sponsored by Wulfsberg Electronics.

Boundary Approximation Using B-Spline Curves

Northern Arizona University (January 2006 – May 2006)

Mentor: Dr. Phillip Mlsna

Research:

- Undergraduate Research – Developed software algorithms to detect and approximate object boundaries within images.

Work Experience

General Dynamics C4 Systems (June 2008 – present)

Electrical Engineer

- Design FPGAs and CPLDs for all types of speeds and interfaces.
- Simulation, test benches, and verification for circuits and programmable devices.
- Currently designing for a high-speed encryption project.

Freescale Semiconductor (May 2007 – August 2007)

Electrical Engineering Intern

- Replaced a platform SRAM controller with another existing design, which I then modified to meet needed specifications and performance.
- Tested and verified the SRAM controller design using system level testing and formal verification.
- Presented work at an intern presentation day, and received the “Best Undergraduate Presentation” award.

Honeywell Aerospace (May 2006 – August 2006)

Engineering Intern

- Researched, designed, and implemented a web application that dynamically generates engineering flow charts and process maps from data stored in a proprietary database.

College of Education, Northern Arizona University (August 2006 – May 2008)

Application Systems Analyst (Webmaster)

- Developed online tools, databases, and the entire College of Education website.
- Required researching and implementing new web technologies.

Technical Skills

I have gained extensive experience in the following areas:

Hardware:

- Circuits / discrete components
- Computers
- Digital multimeters

Programming Languages:

- C
- C++
- Java

- Function generators
- Oscilloscopes
- Programmable microcontrollers

Development Software:

- Adobe Creative Suite
- Altera Quartus II
- ClearCase
- Matlab
- Mentor Graphics suite
- Microsoft Office
- Microsoft Visual Studio
- ModelSim
- Multisim
- Novas Debussy
- Various other SPICE programs

Operating Systems:

- Solaris
- Unix / Linux
- Windows

- Verilog
- VHDL

Web Programming Languages:

- ASP
- CSS
- Flash ActionScript
- HTML
- JavaScript
- JSP
- PHP

Databases:

- MS Access
- MySQL
- Oracle

Personal Enrichment

Missionary (May 2002 – May 2004)

The Church of Jesus Christ of Latter-day Saints

- Put education and career on hiatus to volunteer two years of service.
- Taught and presented to diverse people.
- Performed volunteer service at Ellis Island, various food banks and soup kitchens.

Boy Scouts of America (1994 – present)

- Earned the Eagle Scout rank.
- Frequently involved in service projects.
- Most recently served as Assistant Scoutmaster.

References

Note that I do not include references or my own personal contact details for this online resumé. This is to protect the privacy of my references and me. I have to do it this way because many web "spiders" from undesirable sources randomly search websites for any type of contact information (email addresses, phone numbers, and mailing addresses). They can extract this information from web page code as well as from PDF files. However, if you need my references and contact details, then please contact me using the online contact form on my website (<http://www.mike-thomson.com>).