

MAYA SPIVAK

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- Education** **University of Michigan, Ann Arbor, MI**
- **Master of Science in Engineering: Computer Science and Engineering (December 2012)**
 - **Bachelor of Science in Engineering: Computer Engineering (April 2011)**
 - GPA: 3.95/4.0
 - **Selected Coursework**
 - Data Structures and Algorithms, Operating Systems, Computer Architecture
 - Digital Signal Processing, Embedded Control Systems, Artificial Intelligence
 - Advanced Compilers (Fall 2011), Control Systems Analysis and Design (Fall 2011)
 - **Activities**
 - Eta Kappa Nu – Corresponding Secretary (Fall 2009), Events Officer (Winter 2010)
 - Michigan Marching Band – Clarinets (2007-2009)
 - Outreach through SWE and KGrams Kids Program
 - Academic Games Coach (2007-2010)
- Skills**
- | Languages | Software | Operating Systems |
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| <ul style="list-style-type: none">• Proficient in C/C++• Some knowledge of Java, C#• Verilog HDL | <ul style="list-style-type: none">• MATLAB/Simulink• Automod• Synopsis VCS | <ul style="list-style-type: none">• Windows• Linux• Mac OS |
- Experience**
- Linux Kernel Team, Qualcomm Innovation Center, San Diego, CA** **Summer 2011**
- Profiled the timing of the Linux kernel's CPU Hotplug routine.
 - Implemented changes to the kernel running on multi-core systems to reduce the amount of time required to run the CPU Hotplug routine from over 150 ms to 20 ms.
- Simulation and Analysis Team, Disney Scientific Systems, Lake Buena Vista, FL** **Winter 2011**
- Modeled Walt Disney World rides and animatronics using MATLAB, Simulink, and Automod.
 - Improved the automation of an embedded sensor network programmed in Dynamic C and increased the usability of the web-based user interface.
- Instructional Aide, University of Michigan, Ann Arbor, Michigan** **Fall 2010**
- Led a discussion section, a lab section, and held office hours for EECS 314 (Electrical Circuits, Systems, and Applications)
- Multimedia Display Team, QUALCOMM Incorporated, San Diego, CA** **Summer 2010**
- Implemented a sharpening feature for post-processing of images and video using digital filters on QUALCOMM's mobile display processor.
 - Improved the content adaptive backlight (ABL) algorithm by correcting errors due to idealized hardware assumptions, and ported changes to Linux and BREW platforms.
- Undergraduate Research, University of Michigan, Ann Arbor, MI** **Summer 2009**
- Developed an innovative hardware-based protection scheme for software running on embedded systems under the guidance of Dr. Igor Markov.
 - Modified the CPU of the Nios II Processor on an Altera FPGA to support cryptography.
 - Created an original Verilog module using an implementation of the Digital Signature Algorithm.
- Student Projects Lab, University of Michigan, Ann Arbor, MI** **Summer 2008**
- Collaborated with two other students to develop a prototype of a bed-height sensor device to improve safety in hospitals. A network of these devices is now being used to monitor staff adherence to keeping hospital beds in lowest position while patient is not with a nurse or doctor.
 - Programmed a PIC microcontroller in C using the MPLAB IDE.
- Awards**
- GEM Fellowship.
 - 2011 William L. Everitt Student Award of Excellence, 2008 Arthur B. Singleton Prize.
 - Dean's List, University Honors, Angell Scholar, EECS Scholar.
 - Mentor Graphics Industry Award.
 - Scholar Recognition Award, Engineering Scholarship of Honor and Regents Merits Scholarship.
- Languages** Fluent in Spanish and conversant in Hebrew.