**Adam C. Yang**

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Looking to Transition into a Data Science/ Machine Learning Role

**Education**

**Georgia Institute of Technology** Graduated: Dec 2015

Master of Science, **Electrical Engineering** GPA: 3.80/4.00

Minor in **Computer Science**

**University of Illinois at Urbana-Champaign** Graduated: May 2014

Bachelor of Science, **Electrical Engineering** GPA: 3.53/4.00

* *Graduated with Honors*
* *Dean’s List*

**Work and Project Experience**

**International Business Machine**

*Product Yield and Characterization Engineer* March 2016-Present

Hired as a characterization engineer in charge of SRAM yield and the primary specialist in regards to SRAM related defect monitoring and analysis. Daily responsibilities include tracking and monitoring SRAM yield and analyzing bit fail maps to diagnose chip and wafer level electrical fails. Extensive data mining for correlations and trend analysis are required to isolate device flaws and improve product yield. Coordinate daily with multiple engineering teams in the microprocessor design and fabrication process to communicate findings.

* Discovered and investigated discrepancies in the critical dimensions of device gate and its impact on low voltage yield loss. This resulted in a drastic improvement of low voltage 4 Meg SRAM yield and fixed a systematic defect in the lithography process.
* Analyzed the impacts of device gate height to yield and metrology parameters to help evaluate whether the increased performance justifies the potential yield loss.
* Tracked and analyzed large defect signatures which revealed silicon oxidation occurring during the gate contact etch process as the wafers sit too long in the foup. This discovery and fix resulted in a 20% SRAM yield increase.

**PSYONIC Biotechnology (Bretl Research Group)**

*Research Assistant* April 2015-July 2015

* Designed, tested, and improved prototype variations of electromyography (EMG) circuits for robotic prosthesis control and documented specifications of how the circuit needs to be built to behave appropriately.
* Experimented with Bipolar and Unipolar power supplies as well as designing various EMG circuits to minimize noise
* Designed and experimented with circuits for pressure sensors to be used in prosthetic fingers for tactile feedback via electrical stimulation to the user
* Part of an engineering team working on low cost robotic prostheses for amputees with the capability of recreating tactile feedback and proprioception

**Senior Design** Spring 2014

* Led a team that designed and built an intuitive hand-motion based glove controller for a commercial closed-sourced quadcopter as well as a track and follow system between the quadcopter and the glove controller.
* The process involved extensive soldering, Arduino programming, PCB design on Eagle, among numerous hands-on skills required to design and test the circuit.

**Leadership Experience and Awards**

**Chi Sigma Tau Fraternity** 2010 - 2014

* Held the Positions of Vice-President, National Board Liaison, Secretary, Fundraising Organizer, and Cultural Extension Representative over four years of dedicated service

**Dale Carnegie Leadership Training** Summer 2010

**Boy Scouts of America Eagle Scout** 1998 - 2010

* Dedicated 12 years of involvement in scouting to achieve the highest possible Eagle Scout Badge and accomplished over 300 hours of community service
* Organized and led a two day community service trip to paint an elementary school building in the rural part of Chang Rai, Thailand

**Skills**

***Computer Skills*:** Have project experience in Python, SQL, C, LC-3, Matlab, Processing, Java, Arduino language, Unity 3D, and VHDL programming onto an FPGA as well as PCB design on Eagle CAD software.

***Language Skills*:** English (native), Mandarin (native), Thai (fluent), Spanish (intermediate).