ANDREW WILLIAM HICKEY

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Education

Stanford University – Stanford, CA — December 2017
M.S. in Mechanical Engineering (Mechatronics depth – C programming) — **GPA:** 4.00/4.00

Arizona State University | Barrett, the Honors College – Tempe, AZ — May 2016
B.S.E. in Mechanical Engineering — **GPA:** 4.00/4.00
Thesis: Heat Transport System Design

- Outstanding Engineering Graduate: Top graduate selected by the school of engineering - bit.ly/OutstandingGrad.
- National Silver Medalist in Engineering Technology*:* Invented rotary combustion engine - bit.ly/RotEngine.
- 2x Edson Entrepreneurship Award: $40,000 seed funding and training for venture acceleration - bit.ly/ASUedson.
- Lambda Chi's 30 under 30: Recognized for my leadership from 280,000 national members - bit.ly/LCA30under30.

Work & Research Experience

Tallwave Capital – Scottsdale, AZ & Santa Monica, CA — May 2016 – September 2016
Venture Capital Consultant Intern

- Optimized a client's product blending algorithm (5% more accurate) and on demand manufacturing to reduce lead time.
- Conducted usability testing on iOS app user interface and revised app design to better meet user needs and preferences.

Intel Corporation – Chandler, AZ — May 2016 – September 2016
Technology Development Intern – Manufacturing Operations

- Led 5-person project and implemented manufacturing improvements for suppliers that improved processes by 20%.
- Researched molding processes and mathematical models to increase part strength by 35% and life by 20%.

Ford Motor Company – Dearborn, MI — May 2015 – August 2015
Product Development Intern – Engine Research & Advanced Engineering Department

- Created graphical user interface in MATLAB that analyzed experimental data 1500% faster and reduced error by 10%.
- Identified the extent of oil degradation using Fourier Transform Infrared Spectroscopy (FTIR) and principal component analysis (PCA) to statistically determine correlated variables and internal structures in statistical software -- JMP & Minitab.
- Presented to chief engineer and was 1 of 5 interns selected, based on performance, to meet the Executive Vice President.

Extracurricular Activities & Leadership Roles

BeeSprout | Edson Student Entrepreneur Initiative (bit.ly/Beesprout) — May 2015 – Present
Co-founder & Product Development Lead

- Designing hardware for garden monitoring system that utilizes machine learning -- programming in C++ and JavaScript.
- Conducted surveys and interviews to understand user needs and determine opportunities in the market.

TinkTank (non-profit) – Phoenix, AZ — January 2014 – August 2015
CEO & Co-Founder

- Created mobile techshop platform that visited underprivileged schools that do not have resources to teach STEM skills.
- Implemented 5 successful pilot programs as proof of concept to successfully partner with Arizona State University.

Lambda Chi Alpha – Tempe, AZ — January 2014 – May 2016
Scholastic Chairman

- Implemented scholastic program for 128-member chapter to assist in academic and personal growth.
- Led chapter from an average member 3.17 GPA to a school high 3.42 GPA -- received Standards of Excellence Award.

InnovationSpace | Women & Philanthropy – Tempe, AZ — August 2015 – May 2016
Product Development Lead

- Received $100k grant to join interdisciplinary team to design a disability device -- received ASU's Design Excellence Award.
- Designed and built Bluetooth bone conducting audio receiver with fabricated enclosure and display.

Amazon Echo Hackathon – Phoenix, AZ — Summer 2016

- Programmed skills for the Amazon Echo that interpret user's speech and performs a specific task – won a Amazon Tap.

Intel Maker Challenge – Tempe, AZ — Summer 2016

- Created home & garden automated system controlled by a web server – in C++ and Javascript.

Interests & Programming/Software Languages

Hobbies: Zip Line Guide for 2 years, AZ Cardinals, inventing devices, financial markets/investing, soccer, tennis, UX design
Competent: MATLAB, C, SolidWorks, JMP, Excel, Six Sigma Green Belt
Knowledgeable: JavaScript, R, Python, CSS, C++, Swift, LabVIEW, Minitab, HTML5, Patron, Moldflow