ANDREW WILLIAM HICKEY

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Education

Stanford University – Stanford, CA — December 2017
M.S. in Mechanical Engineering (depth: Mechatronics)

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.

Six Sigma Green Belt — May 2016

Work & Research Experience

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

- Led project that improved a manufacturing process by 40% using statistical methods (DOE) and managing team.
- Researched injection molding processes and utilized CFD to increase part strength by 35% and life expectancy by 20%.

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

- Optimized a client's product blending algorithm and on demand manufacturing equipment to reduce lead time.
- Conducted usability testing on iOS app UI to revise design to better meet user needs and preferences.

Ford Motor Company – Dearborn, MI — May 2015 – August 2015
Product Development Intern – Powertrain Research

- 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.

Arizona State University – Tempe, AZ — August 2014 – May 2015
First Year Success Coach

- Met with an average of 11 students each week for the Intensive Coaching Unit that focused on diverse students who struggled financially, academically and/or were a first generation student.
- Recipient of the "Catalyst Award" (1 out of 75 coaches) for "exceptional ability to inspire, impact and motivate students."

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.
- Established a lean startup business plan and partnership with manufacturer.

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.
- Included: research, concept generation, detailed design, analysis & verification testing, and design for manufacturing.

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

- Created mobile techshop platform that visits underprivileged schools that do not have resources to teach STEM skills.
- Implemented 5 successful pilot programs as proof of concept, a business strategy, and exit with ASU partnership.

Interests & Programming/Software Languages

Hobbies: Zip Line Guide for 2 years, AZ Cardinals, inventing new devices, soccer, tennis, rappelling, designing websites, hiking
Competent: MATLAB, SolidWorks, JMP, Excel
Knowledgeable: JavaScript, Python, CSS, C++, C, LabVIEW, Minitab, HTML5, Patron, Moldflow