

ANDREW WILLIAM HICKEY

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Education

- Stanford University** – Stanford, CA December 2017
M.S. in Mechanical Engineering
- 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
- **National Silver Medalist in Engineering Technology:** Invented rotary combustion engine - bit.ly/RotEngine.
 - **Outstanding Engineering Graduate:** Top graduate selected by the school of engineering - bit.ly/OutstandingGrad.
 - **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 – Present
Venture Capital Consultant
- Analyzed clients' alignment with their customer demographic with large data processing and surveying.
 - 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++, LabVIEW, Minitab, HTML5, Patron, Moldflow