# ANDREW WILLIAM HICKEY

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#### Education

#### Stanford University - Stanford, CA

M.S. in Mechanical Engineering (Mechatronics depth – C programming)

# Arizona State University | Barrett, the Honors College - Tempe, AZ

B.S.E. in Mechanical Engineering

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

# McKinsey & Company - Chicago, IL

June 2017 – August 2017

December 2017

**GPA:** 3.97/4.00

**GPA:** 4.00/4.00

May 2016

Summer Business Analyst – Digital McKinsey

# Intel Corporation – Chandler, AZ

May 2016 - September 2016

#### Technology Development Intern – Manufacturing Operations

- Led 5-person project to improve a supplier's manufacturing procedure by 20% -- JMP.
- Researched injection molding processes and mathematical models to increase part strength by 35% and life by 20%.

#### 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.

#### 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, 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.

# 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, C++, SolidWorks, JMP, Excel, Six Sigma Green Belt

Knowledgeable: JavaScript, R, Python, CSS, Swift, LabVIEW, Minitab, HTML5, Patron, Moldflow