

# Andrew Duenner

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## EDUCATION

- The University of Texas at Austin** – GPA: 3.9 May 2016  
B.S. Mechanical Engineering
- The University of Tulsa** - GPA: 3.9 January 2013 - May 2014  
B.S. Mechanical Engineering
- The University of Texas at Austin** – GPA: 3.9 May 2012  
B.B.A. Business Honors and Finance

## ACADEMIC EXPERIENCE

- January 2015 - Present  
**University of Texas Nanoscale Design and Manufacturing Lab** Austin, TX  
*Undergraduate Research Assistant*
- Developed novel method for passive alignment of silicon wafers
  - Jointly designed automated sample stage for atomic force microscope
  - Optimized and fabricated micronewton resolution strain gauge amplification sensor
- August 2015 - Present  
**The University of Texas at Austin** Austin, TX  
*Teaching Assistant*
- Served as teaching assistant and grader for machine tool operations class
  - Assisted with development of assignments for CNC machining topic

## INDUSTRY EXPERIENCE

- November 2012 – May 2015  
**Oklahoma Forge, Inc.** Tulsa, OK  
*Engineering Intern*
- Designed, and installed an industrial descaling system to improve forging quality
    - Created custom parts and simulated mechanical interactions in SolidWorks
    - Programmed and wired control interface for programmable logic controller
  - Assisted with the design of an open-die chain link forging press

## ACTIVITIES

- Advanced Open Water Scuba Diver** Fall 2012 – Fall 2013  
**Amateur Radio Operator, Technician (KF5LBF)**

## HONORS & AWARDS

- National Merit Scholar** **Dean's Honor List** – Four Semesters  
**Phi Beta Kappa** **University Honors** – Five semesters

## PUBLICATIONS

- Duenner A, Cullinan MA. Passive Semiconductor Wafer Alignment Mechanism to Support In-line Atomic Force Microscope Metrology. ASPE 2015 Annual Meeting. Austin; 2015.
- Yao T-F, Duenner A, Cullinan MA. In-line, Wafer-Scale Inspection in Nano-Fabrication Systems. ASPE 2015 Annual Meeting. Austin; 2015.
- Ladner I, Duenner A, Cullinan MA. Carbon Nanotube Growth Force Detection on Multi-Axis MEMS Sensor with Integrated Microheater. ASPE 2015 Annual Meeting. Austin; 2015.

## CERTIFICATIONS

- Certified LabVIEW Associate Developer**

## SPECIAL SKILLS

- Software:** Microsoft Office, SolidWorks, Matlab, LabVIEW, Python, Eagle, Mastercam  
**Technical:** CNC programming and machining, electronic circuit design and fabrication