**Leah Jacobs**

**(281) 777-0248**

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 **linkedin.com/in/leah-jacobs-145242127**

Masters student focused on advanced manufacturing with emphasis on repeatability and reproducibility through structured light-scanning. Will segue to PhD with continued focus on advanced manufacturing. Team leadership skills, experienced with detailed designs and build. Inquisitive, diligent, cooperative.

**EDUCATION**

**University of Tennessee-Knoxville**, Knoxville, TN  **Graduation** - **Dec. 2022**

**Masters of Science in Mechanical Engineering GPA 3.70**

**Lipscomb University**, Nashville, TN  **Aug. 2016-May 2020**

**Bachelor of Mechanical Engineering GPA 3.75**

*Honors*: *Mechanical Engineering Scholarship*

*Legacy: Endowed Leah J. Jacobs Scholarship in Engineering for Women*

**Activities**

**ASME (American Society of Mechanical Engineers)**-*member* **Fall 2016-Present**

**SWE (Society of Women Engineers)**-*member* **Fall 2016-Present**

**Lipscomb Engineering Honors Society 2019-2020**

* Inducted as a member and elected as Society secretary

**Lipscomb University BisonBots**-*Robot camp counselor*  **Summer 2017**

**LU Aeronautics Team Fall 2018 – Spring 2020**

**EXPERIENCE**

**Reseach Assistant August 2020 – Present**

University of Tennessee Knoxville, Knoxville

* Conducted research experiments focused on advanced manufacturing and analysis using scientific methods and techniques with emphasis on repeatability and reproducibility of structured light scanning.
* Assisted with development and communication of research findings to internal and external audiences.
* Processed and summarized data and reported experiment results using software applications or program platforms.
* Operated various electronic devices to collect and tabulate data.
* Project funded by Office of Naval Research in partnership with University of Tennessee and Oregon State University.

**LUAeronautics**- NASA Student Launch Competition - design and launch specialist **Fall 2018**-**Spring 2020**

**Hayward Design Project Fall 2019**

* Worked with a team to develop increased heat transfer in natural gas heat exchangers

**Tennsco Intern Summer 2019**

* Focused on quality control and engineering processes documented using Microsoft Word.
* Self-taught Autodesk Inventor to update part diagrams in production environment.
* Administered and created training and awareness presentations or materials.

**VOLUNTEER EXPERIENCE**

**Business as Missions-**Teaching business principals in Jamaica **May/June 2019**

**YMCA-**Youth mentor for children with disabilities **2018-Present**

**American Diabetes Association**-*Member* **2007-Present**

**Habitat for Humanity Fall 2013**

* Fund-raising and construction labor

**CERTIFICATIONS**

Calypso Basic

GOM Scanning

ACE CNC Machining Training Program

**PUBLICATIONS**

A. Cornelius, J. Dvorak, L. Jacobs, J. Penney, and T. Schmitz, “Combination of structured light scanning and external fiducials for coordinate system transfer in hybrid manufacturing,” *Journal of Manufacturing Processes*, vol. 68, pp. 1824–1836, Aug. 2021.

**SKILLS**

Excellent Communicator and Impactful Presenter

Problem Solving and Critical Thinking

**SOFTWARE**

* Microsoft Office
* Microsoft Excel
* Fast Learner
* Adaptability
* Highly organized and efficient
* Solidworks (CAD)
* Autodesk Inventor
* Matlab
* Microsoft PowerPoint
* Microsoft Word
* Onshape
* 3D Scanning
* CNC Machining
* CMM
* Calypso
* GOM Inspect
* Fusion 360
* Adobe InDesign
* Adobe Photoshop