Samuel Jett

SamJett.com • 972-890-5393 • Samjett247@gmail.com

EDUCATION

The University of Oklahoma | Norman, OK

    Master of Science in Mechanical Engineering | Cumulative GPA: *3.86 / 4.00* | May 2019

    Bachelor of Science in Mechanical Engineering | Cumulative GPA: *3.99 / 4.00* | May 2018

ENGINEERING PROJECT ROLES

Project Leader and Designer   *Nov. 2017 - May 2019*

Dynamic Collagen Imaging Project | Biomechanics and Biomaterials Design Lab

- Developed a polarization-based optical system to quantify dynamic collagen fibers in tissues
- Wrote **LabView** scripts to synchronize system projector, motor, camera, and mechanical tester
- Analyzed images via custom-built **Python** scripts to isolate the collagen fiber orientations
- Presented as MS competition finalist at the *World Congress of Biomechanics* (Su2018, Ireland)
- Submitted results of novel opto-mechanical investigation for publication in June 2019

Lead Software Developer   *Nov. 2018 - June 2019*

Visualization of Student-Teacher Evaluations | The University of Oklahoma

- Scraped public evaluations (*pdf* format) from OU's website with **Python** and input to **MongoDB**
- Built a dockerized API server hosted on GCP in **Python** to rapidly query from the dataset
- Developed a visualization (ou.evals.info) through **ReactJS** to open the data for student use

Project Leader and Researcher   *Jan. 2017 - Nov. 2018*

Heart Valve Mechanical Testing | Biomechanics and Biomaterials Design Lab

- Created protocol and led 5-person research team to quantify valve tissue mechanical responses
- Processed the biomechanical data and developed figures for presentation through **MATLAB**
- Presented research findings at the *Engineering Mechanics Conference 2018* in Cambridge, MA
- Published baseline results in July 2018 and regional mechanical results in November 2018

Design, Analysis, and Fabrication Engineer   *Jan. 2017 - Apr. 2018*

Student-Built Wind Tunnel Team | Max Westheimer Airport

- Designed various models of closed and open loop wind tunnel prototypes in **Solidworks**
- Tested the designs in **SW Flow Sim** and **ANSYS** to determine optimal design for fabrication
- Published and presented results at the AIAA Region IV Student Conference, earning 2nd place

WORK EXPERIENCE

Internship in Robotic Process Automation   *Aug. 2018 - Dec. 2018*

American Fidelity Insurance Co. | Oklahoma City, Oklahoma

- Used HTML tags and Optical Character Recognition (OCR) to interact with business applications
- Saved legal team $10,000/yr through automating the extraction of client records on subpoena

Internship in Electronics and Payloads   *May 2017 - Aug. 2017*

Northrop Grumman | Melbourne, Florida

- Defined and developed a novel tactical communications infrastructure for proposal bid
- Wrote code in **VBA** to improve functionality of an employee directory management document

SCHOLARSHIPS AND ACCOLADES

Research Travel Awards from IBEST, School of AME, and OU-OUR	Apr. 2018
Undergraduate Mentored Research Fellowship	2017-2018
National Merit Scholarship	2014-2019