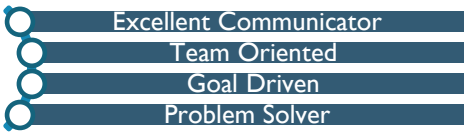
BRYAN RODRIGUEZ

College Station, TX | 979-422-6480 | bryanrgz@tamu.edu | LinkedIn

PROFICIENT MECHANICAL ENGINEER

Determined team player pursuing a Master of Science involved in a wide range of disciplines in Mechanical Engineering to provide structured solutions and trained to deliver outcomes orally or in writing.



- Involvement in industry funded experimental research projects to advance the design and reliability of fluid film bearings and squeeze film dampers (SFDs), contributing to receiving research expenditures close to $300k.
- Proven record of success by co-authoring two journal publications and technical reports to the American Society of Mechanical Engineers (ASME) and the Turbomachinery Research Consortium (TRC)

AREAS OF EXPERIENCE

- *Fluid Film Lubrication*
- *Rotordynamics and Vibrations*
- *Mechanical Design, introductory GD&T*
- *Computer Aided Engineering & Manufacturing*
- *Additive Manufacturing and Rapid Prototyping*
- *Dynamic testing of mechanical systems*
- *Fabrication of rapid prototypes using additive manufacturing*
- *Supervised use of CNC centers, mill and lathe*
- *Assembly, operation and revamping of rotordynamic test rigs*
- *Use of Finite Element Analysis (FEA) tools*

Education

TEXAS A&M UNIVERSITY (TAMU) — **COLLEGE STATION, TX (JAN 2019- FALL 2021)**

Master of Science in Mechanical Engineering, GPA: 3.75/4.0

MONTERREY INSTITUTE OF HIGHER EDUCATION (ITESM) — **QUERÉTARO, MÉXICO (FALL 2013-FALL 2018)**

Bachelor of Science in Mechanical Engineering, GPA: 4.0/4.0:

Summa Cum Laude, High Performance Academic Scholar, Diploma of Integral Formation and Excellence, Football student-athlete

BAYLOR UNIVERSITY — **WACO, TX (SPRING 2017)**

International Exchange Program, GPA: 4.0/4.0

Professional Experience

Jan 2019-Current • Graduate Research Assistant • *TEES* • COLLEGE STATION, TX

TAMU Turbomachinery Laboratory, *37k sq. ft. state-of-the-art experimental facility*

- *Characterize the dynamic force performance of O-ring sealed Squeeze Film Dampers (SFDs).*
- *Certify the reliability of different types of gas journal bearings by conducting static and dynamic load experiments.*
- *Quantify the effect of various means of direct lubrication on the performance of tilting pad journal bearings.*
- *Analyze, report and present new knowledge to industry sponsors and relevant journals of engineering.*

Feb 2018 – Dec 2018 • Research Intern ETU R&D• QUERÉTARO, MÉXICO

ETU R&D delivers world-class solutions to the energy industry through the application of advanced analysis and experimentation

- *Perform an aerothemodynamic analysis to a 50 hp steam turbine.*
- *Conduct static structural and thermal FEA analyses to determine product reliability.*
- *Assist in hydrostatic, mechanical and vibration tests to a 50 hp steam turbine.*

Aug 2015, Jul 2016 • Quality Control Intern • *Mabe Technology and Projects*• QUERÉTARO, MÉXICO

Company dedicated to design and create appliances distributed to more than 70 countries.

- *Assist quality engineers in performing 50+ supplier process audits.*
- *Visit 10+ manufacturing sites to inspect supplier products and 800+ engineering drawings.*
- *Manage two engineers' audit schedules and assist conducting quarterly lean 6σ trainings.*

Selected Research Projects

- *Maneuver Load Experiments on a Gas Bearing System (ASME Paper #GTP-20-1430).*
- *Experimental performance of a SFD sealed with O-rings (ASME Paper #GTP-21-1380)*
- *Evaluation of the Performance of Tilting Pad Journal Bearings (Sponsored by Elliott Group).*

Involvement/Leadership

- *Society of Tribologists and Lubrication Engineers (STLE), ASME*
- *Provide training and leadership to undergraduate student workers (TAMU, 2019-2021).*
- *Peer mentoring to undergraduate students (ITESM, 2015 – 2021).*

Honors

- *Ralph James Endowed Scholarship (2021)*

Software

- *Solidworks, Fusion 360*
- *Matlab, LabView*
- *ANSYS, XLTRC2*
- *Cura*

Languages

- *Spanish (Native)*
- *English(Fluent)*

Candidate Eligible to work in the US