

Raul D. Avendano

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Objective

Seeking full time position as a mechanical engineer in the field of rotordynamics or other related areas.

Education

Texas A&M University **College Station, TX**
M.S. in Mechanical Engineering – [Jun 2008 –May 2010]
Dynamics and Vibrations, GPA: 3.70

Graduate Certificate in Business
Mays Business School

Texas A&M University **College Station, TX**
B.S. in Mechanical Engineering, GPA: 3.64 [Graduation Date: May 2008]

Work Experience

Turbomachinery Laboratory, Texas A&M University **College Station, TX**
Graduate Research Assistant for Dr. Dara Childs [May 2008 – Present]

- Research the impact of coupling misalignment on rotordynamics
- Build 4,6, and 8 bolts-per-flange disc-pack coupling models
- Simulate parallel and angular coupling misalignment
- Analyze force signal for any higher (2x,3x,...) frequency components
- Write a code for XLTRC², a rotordynamic software suite, using research results to predict a rotor's orbit

Undergraduate Research Student for Dr. Dara Childs [May 2007 – May 2008]

- Researched the circumferential blade loss effects on a rotor-bearing application system
- Used XLTRC² to simulate a blade loss event
- Analyzed the Moes Finite-Length Impedance formulation

Student Technician [Aug 2006 – May 2007]

- Assisted in building a rig that tested the effects of whip and whirl
- Installed the air and water supply lines for the test rig
- Built parts for the rig using a lathe, mill, and drill press

GE Energy, General Electric Inc.

Combustion Cell Co-op, Supervisor: Kevin Cunningham **Houston, TX**
[Jan 2006 – Aug 2006]

- Designed fixtures used in the repair of a frame 9EC gas turbine
- Assisted in designing strips used to improve the repair process of seal lands in the transition pieces of 7FA+e gas turbines
- Developed communication skills by working with the labor union on a daily basis
- Issued incoming and repair Planning for combustion components of 6FA, 7FA, and 9EC gas turbines and wrote Condition and Final Reports for the clients
- Inspected incoming parts and completed quality control checks on repaired components

Technical Skills

- *Application Software:* XLTRC², SolidWorks, CosmosWorks, MatLab, LabView, ADRE, Maple, Mathcad, Microsoft Office Suite 2003 and 2007
- *Programming Languages:* C/C++, Visual Basic, FORTRAN

Language Skills

- Fluent in *English*
- Native language is *Spanish*

Awards and Achievements

- Completed the *Fundamentals of Engineering* (FE) Exam – April 2008
- *Engineer-In-Training* approved by the Texas Board of Professional Engineers – Mar 2009
- Graduated with *Cum Laude* Honors from the B.S. in Mechanical Engineering – May 2008
- *Undergraduate Summer Research Grant (USRG)* at Texas A&M University - Summer 2007
- *Dean's Honor List* - Fall 2006, Spring 2007

Relevant Coursework

- *Graduate* – Rotordynamics, Lubrication Theory, Nonlinear Vibrations, Mechanical Vibrations, Engineering Dynamics, Design of Mechanical Components and Systems, Computer-Aided Engineering, Advanced Engineering Thermodynamics

Professional Affiliations

- American Society of Mechanical Engineers (ASME)
- Pi Tau Sigma Honor Society
- Golden Key International Honor Society

Work Eligibility

Authorized to work in the US through the Optional Practical Training (OPT) program