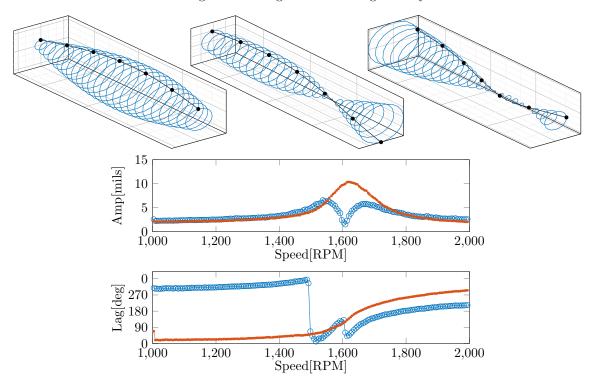
Experimental and Theoretical Evaluation of Rotordynamic Systems

Time and frequency domain analysis of experimental data from rotordyncamic systems. Development of the finite element method for use in rotordynamics with a rotating Timoshenko beam element including viscous and hysteretic internal damping. Analysis techniques for the multiple degree of freedom system specific for rotordynamics. Evaluation of the application of an Active Magnetic Bearing on an overhung rotor system.



Cameron Naugle

Committee: Dr. Mohammad Noori, Dr. Hemanth Porumamilla, Dr. Peter Schuster, and Dr. Xi Wu(Advisor)

A thesis presented for the degree of Master of Science



Mechanical Engineering California Polytechnic State University, San Luis Obispo

Wedenesday, April 4th, at 8:30 A.M. Kennedy Library, Room 216K