

## CURRICULUM VITAE

### EDUCATION

Ph.D. (Aerospace Engineering), University of Michigan, Ann Arbor, Michigan

M. Eng. (Energy Technology), Asian Institute of Technology, Bangkok, Thailand

B. Eng. (Mechanical Engineering), Rangoon Institute of Technology, Rangoon, Burma

### ACADEMIC EXPERIENCE

August 2011 – Present

**Professor**

Lamar University

August 2005 – August 2011

**Associate Professor**

Lamar University

August 2001 – August 2005

**Assistant Professor**

Lamar University

January 1999 – August 2001

**Research Assistant Professor**

University of Southern California

September 1996 – December 1999 **Post-doctoral Fellow**

Georgia Institute of Technology

May 1993 – August 1996

**Research Assistant**

University of Michigan

August 1992 – May 1993

**Teaching Assistant**

University of Maryland

January 1991 – August 1992

**Research Assistant**

National University of Singapore, Singapore

January 1990 – August 1991

**Graduate Student**

Asian Institute of Technology, Thailand

September 1983 – August 1989

**Lecturer**

Rangoon Institute of Technology, Burma

## **TEACHING**

### **Courses Taught**

#### ***Undergraduate:***

##### *Core Courses:*

Dynamics, Engineering Thermodynamics I, Engineering Thermodynamics II, Fluid Mechanics, Measurements Lab, Seminar, Thermal Systems Design, Integrated Systems Design, Senior Design Project

##### *Elective Courses:*

Turbomachinery, Introduction to CFD, Energy Engineering, IC Engines, Combustion Theory and Applications

#### ***Graduate:***

##### *Core Courses:*

Advanced Engineering Analysis, Optimization of Thermal Systems

##### *Elective Courses:*

Advanced Fluid Dynamics, Selected Topics in Fluid Dynamics, Energy Conversion Systems, Introduction to CFD, Energy Engineering, IC Engines, Combustion Theory and Applications

### **Teaching Grants**

Received 6 Senior Design Project Grants from American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE): 2 grants (\$5,000 and \$3,950) in 2002, 1 grant (\$5,000) in 2003, 1 grant (\$5,000) in 2004, 1 grant (\$4,600) in 2005, and 1 grant (\$5,000) in 2016.

## **Lamar University Teaching Award**

- Presidential Faculty Fellow for Innovation in Teaching Activity, 2014
- Presidential Faculty Fellow for Innovation in Teaching Activity, 2015
- Distinguished Faculty Fellow for Teaching, 2015

## **Undergraduate Student Mentor/Sponsorship**

Faculty advisor:

- Lamar Sigma Xi Section of Pi Tau Sigma ME Honors Society (2015 - 2016)
- Lamar ASME Student Chapter (2001 - Present)
- Lamar SAE Student Section (2005 - Present)
- Lamar ASABE Student Section (2006 - 2012)

Faculty Advisor:

- Over 50 Senior Capstone Design Teams (2004 – Present)
- Several teams won prizes and scholarships in regional and national design competitions such as SAE Baja and Texas Space Grant Consortium (TSGC) Design Challenge.

Faculty Mentor

- 2 McNair Scholars: Terry Willemin (2004) and Clent Holmes (2006)

Faculty Mentor:

- Sponsored a paper published by a group of undergraduate students  
J. Weir, A. Hatton, L. Hughes, M. Pruitt, C. Mitchell and **K. Aung**, “A Parametric Study of a 4-Stroke Motorcycle Exhaust System,” 2004 International Mechanical Engineering Congress and RD&D Exposition, Anaheim, CA, November 2004.

## **RESEARCH AND SCHOLARLY ACTIVITIES**

### **Research Areas and Interests**

Modeling and simulation of renewable energy and energy systems, hydrogen flames, combustion and reacting flows, alternative fuels (bio diesel, ethanol, methane, hydrogen) and their uses in IC engines