



# 2014 Annual IE Honors and Awards Banquet

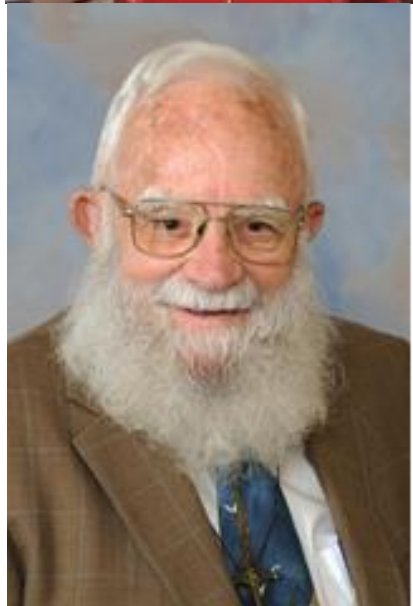
Department of Industrial Engineering  
May 2, 2014

Department of Industrial Engineering  
University of Houston





# Tribute to George Hall!



- BS (Math '59), BS (IE '77), MS in Safety (USC '88), and MIE (2011)
- A Life Member of the University of Houston Alumni Organization in 1975
- Served on Alumni Board of Directors
- IE Distinguished Alumni Award (2006)
- Distinguished Service Award (2010)
- He was known for his humor, optimism, and energy.
- Incredibly proud of his alma mater
- Mr. Hall demonstrated his enthusiasm for all things UH by driving a red SUV with plates reading "SR Coog," faithfully attending UH football and basketball games, and
- Generously creating opportunities for other students by endowing several **scholarships**.

George Leroy Hall died peacefully on Wednesday, June 12 2013, with wife, Myra, and daughter, Lisa by his side.



# Our Alums are doing GREAT!

**Dr. Durga Agrawal (Ph.D. in IE) appointed as a member of the University of Houston System Board of Regents**

**Dr. Daryl Santos (MSIE '90, PH.D. IE '93) was named a Vice Provost for Diversity and Inclusiveness and Professor of Systems Science and Industrial Engineering The State University of New York – Binghamton**

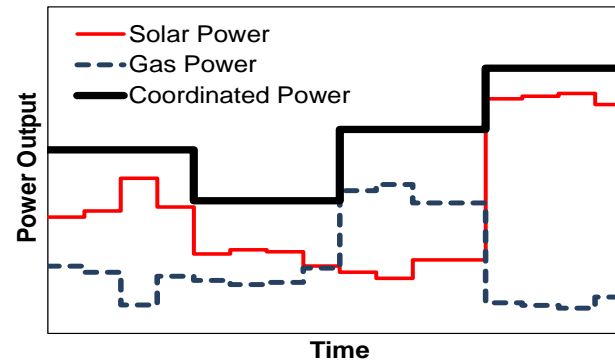
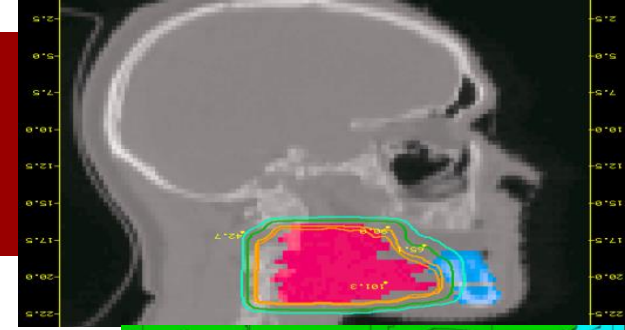
**Mr. L. Xavier Cano (BSIE '04 (UH), MBA '08(UT)) recently published a book about resume writing**





# Core Research Areas

- **Healthcare and Medical Decision Making**
  - Cao, Lim, Peng
- **Homeland Security, Port Security**
  - Chen, Lim, Chung, Schulze
- **Energy**
  - Khator
- **Reliability and Maintenance**
  - Feng
- **Logistics and Transportation, Supply Chain**
  - Chen, Lim, Tekin
- **Manufacturing**
  - Feng, Kamrani, Tekin





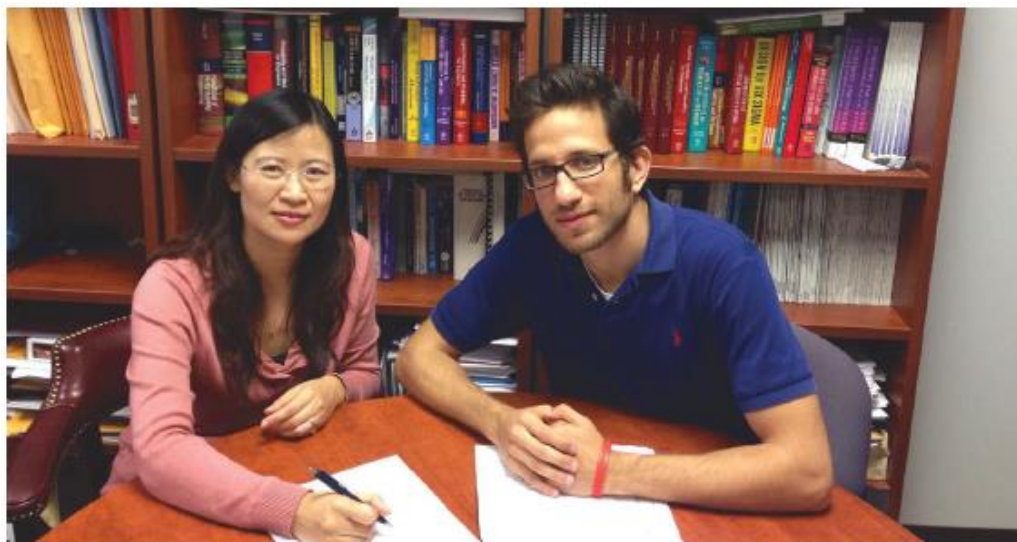
# Featured Publications in IE Flagship Journal



Professor Qianmei May Feng (left) and doctoral student Hao Peng from the University of Houston

“Reliability and Maintenance Modeling for Systems Subject to Multiple Dependent Competing Failure Processes,” *IIE Transactions*, 2011

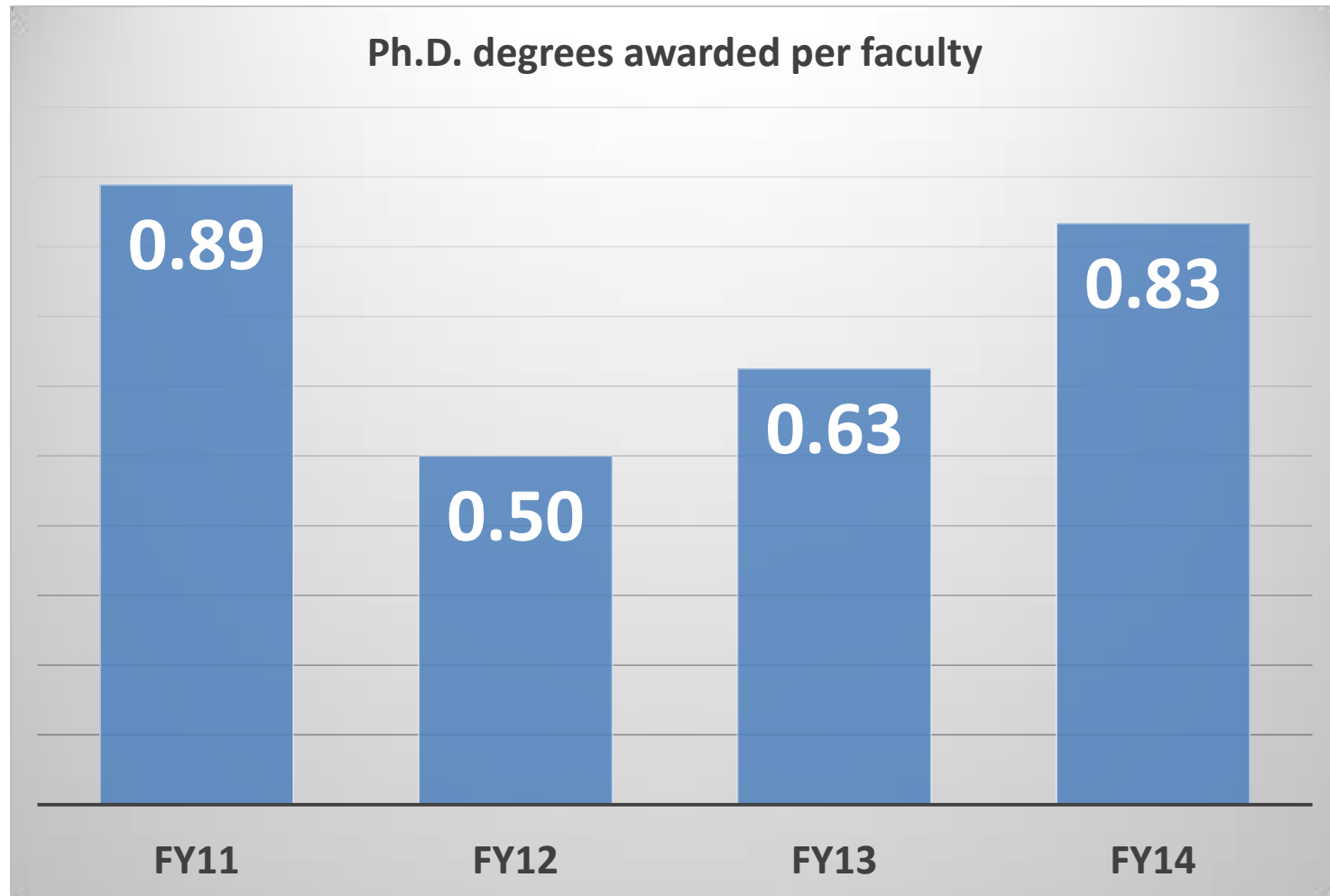
“Reliability Modeling for Multiple Dependent Competing Failure Processes with Changing Degradation Rate,” *IIE Transactions*, 2014



Professor Qianmei (May) Feng (left) and doctoral student Koosha Rafiee helped develop new methods to model system reliability.



# IE Ph.D. Degree Awarded per Faculty



We are *well above* the college average **0.4**



# Interdisciplinary Graduate Programs

- **Current course requirements:**
  - MBA requires 48 hours
  - MIE requires 33 hours (effective Fall 2014)
- **MIE/MBA (60 hours)**
  - MBA 36 hours
  - MIE 24 hours
  - Common CR: 12 hours
  - 24 hours savings → attractive program



# Department Strengths

- One of the highest departments in CCOE on return-on-investment (ROI) in faculty hires
- Rated the most productive Department at UH in terms of SCH per faculty (590 vs 420)
- Highest Ph.D. degrees awarded per faculty in CCOE (0.83 vs 0.4)
- Highest M.S. degrees awarded per faculty in CCOE (3.63 vs 1.68)
- Highest 6 yr FTIC graduation rate in CCOE (72% vs 28%)
- Most efficient staff in the college (3 staff → 3% CCOE)
- Strong alumni support: scholarships, internships, employments, and donations





*For Houston's Homeless Since 1907*



- ❖ Star of Hope was founded in 1907 and it is a non-profit organization that helps the homeless.
- ❖ They are funded through public and private donations and assisted by more than 7,000 volunteers.
- ❖ Star of Hope has a donation center located near downtown where people can donate items.

## Applied **Six Sigma DMAIC**

To improve the donation center floor layout



**DEFINE**

Define the problem.



**MEASURE**

Map out the current process.



**ANALYZE**

Identify the cause of the problem.



**IMPROVE**

Implement and verify the solution.



**CONTROL**

Maintain the solution.



# IE Sponsored Workshops and Certificate Programs

- Lean Principal (multiple times)
- Six Sigma Greenbelt (multiple times)
- Lean Six Sigma (multiple times)
- Lean Supply Chain Management
- MTM-USA
- RFID Technology and Application Developments
- Value Stream Mapping (VSM)



**Motivation:** to help IE Coogs in their job search.

- A three day on weekends
- Free to all student attendees
- Audience: IE students and Alumni
- Most recent workshop “Six Sigma Greenbelt” was held in April 2014 with 74 attendees

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# IE Sponsored Capstone Design Projects (2014)

## **Project 1:**

*Sponsor:* M.D. Anderson Cancer Center  
*Title:* SCD Controllers Distribution and Inventory Analysis

## **Project 2:**

*Sponsor:* Cook Compression of Dover Corporation – Sugar Land Plant  
*Title:* Analysis and Implementation of Standardized Inventory Process Using Lean Six Sigma Concepts

## **Project 3:**

*Sponsor:* Leading Edge Turbine Technology Services.  
*Title:* Improving Quoting Process to Enhance Interdepartmental Communication and Project Plans

## **Project 4:**

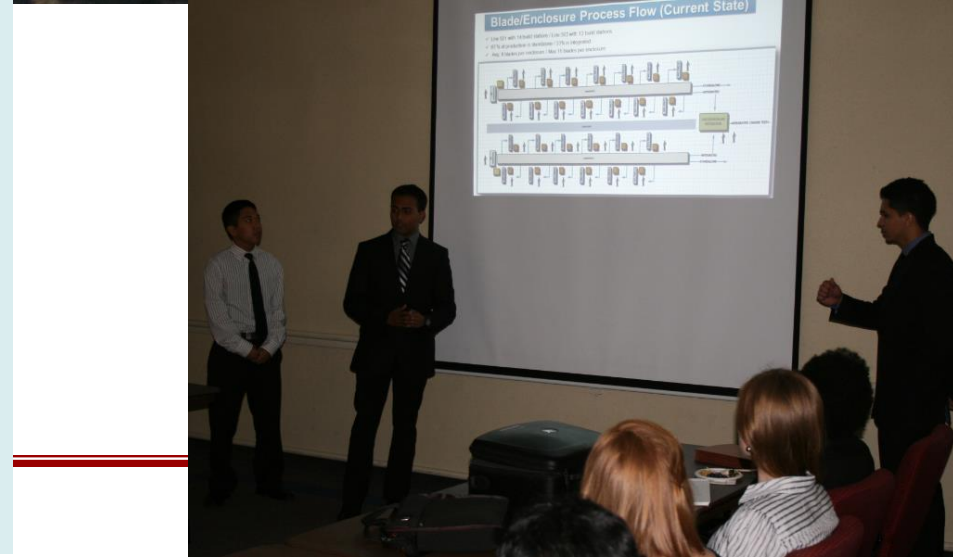
*Sponsor:* Industrial Engineering Department (Dr. Chen)  
*Title:* Data Mining of Hospital Emergency Department (ED) Patients Using Artificial Neural Network

## **Project 5:**

*Sponsor:* FMC Technologies  
*Title:* Consignment Spaces Process Improvement

## **Project 6:**

*Sponsor:* Cook Compression of Dover Corporation – Pearland Plant  
*Title:* Product Quantity Process Routing Analysis and Lean Improvement





# Research Poster Competition sponsored by U.S. DHS



University of Houston

Department of  
Industrial Engineering

## Student Poster Competition on **PUBLIC SAFETY MANAGEMENT**

SPRING 2012



The Department of Industrial Engineering at the University of Houston is pleased to announce the launch of its first annual student poster competition in the area of public safety management (PSM). This poster competition is part of the efforts in promoting the awareness in PSM.

Research areas of interest include:

- Decision making for public safety
- Evacuation planning and management
- Environmental health and safety
- Logistics and transportation security
- Economics of disaster

These subjects are directly relevant to the missions of Department of Homeland Security in disaster preparedness, response and recovery. The posters should demonstrate innovative applications in one or more of these areas. Posters will be evaluated on relevance, quality of research and presentation quality.

### Eligibility

All **undergraduate** and **graduate** students enrolled in Spring 2012 at the University of Houston are eligible. Posters can be done individually or as a team effort.

### Awards

First Place	\$500
Second Place	\$300
Third Place	\$200

### Requirements

To enter the competition, email your name, school affiliation, poster abstract and telephone number to [etekin@uh.edu](mailto:etekin@uh.edu) by March 1, 2012. If your abstract is accepted for the competition, your poster will be evaluated by an expert panel of judges on April 13, 2012. The size of the poster should be 36" by 48". The time and place will be announced later.



Proud winners of 2012



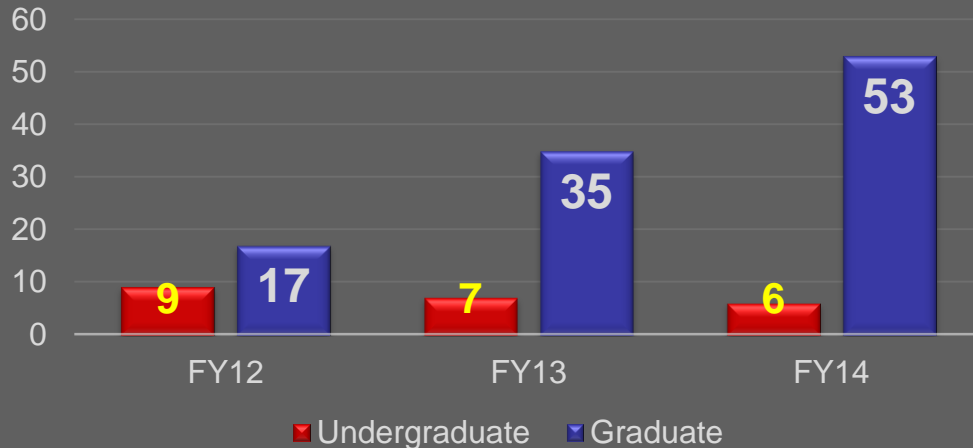
# IE Department Scholarships



- Dr. and Mrs. Durga Agrawal
- Piping Technology
- Hari Agrawal
- Brij Agrawal
- Sam Scharff
- Larry and Gerri Snider (Women in Engineering)
- George and Mayra Hall
- Many scholarships matched by Scott T. Poage endowment
- ...



## IE Department Scholarship Recipients





# Scholarships

## - Dr. May Feng

- Hari & Anjali Agrawal Scholarship
- Melody Kathryn Snider-Porter Women in IE Scholarships
- Sam Scharff Scholarship
- Society of Iranian American Women in Education Scholarships
- Scott T. Poage Matching Scholarships



# Hari & Anjali Agrawal Scholarship

- ❖ This competitive scholarship is awarded to qualified graduate students. Applications must be submitted by students in order to be considered for this scholarship
- ❖ Recipient:
  - Dinesh Vijeyakumar (MIE student)



# Melody Kathryn Snider-Porter

## Women in IE Scholarships

- ❖ This competitive scholarship is awarded only to female undergraduate students that are enrolled full time in the Industrial Engineering department. The selection is based on:
  1. Good academic standing
  2. Must be US citizen or permanent resident
  3. Availability of funds
  
- ❖ Recipients:
  - Anita Vaezian
  - Veronica Neary By





# Sam Scharff Scholarship

- ❖ This competitive scholarship is awarded to senior level students in recognition of their good academic standing in Industrial Engineering and the Cullen College of Engineering. The selection is based on:
  1. Good academic standing
  2. GPA (IE)
  3. Credit hours (IE)
  4. Availability of funds
  
- ❖ Recipient:
  - Youssef Ben Jemaa



# Society of Iranian American Women in Education Scholarships

- ❖ This competitive scholarship is awarded to Iranian American Students who are in good academic standing in Engineering
- ❖ Recipients:
  - Fatemeh Ahmadpoor (ME)
  - Hamid Faizi (ECE)





# Scott T. Poage Matching Scholarships

- ❖ This competitive scholarship is awarded to a full-time undergraduate or graduate student. Applications must be submitted by students in order to be considered for this scholarship. The selection is based on:
  1. Good academic standing
  2. Availability of funds
  
- ❖ Dr. Randal Sitton Scholarship → Aida Khayatian
- ❖ Dr. Victor Zaloom Scholarship → Maryam Zaghian
- ❖ Dr. Thomas Chen Scholarship → Rifadh Mohammed Jeelani
- ❖ Otis W. “Sandy” Fine Scholarship → Taofeek Biobaku
- ❖ Dr. Yaowu Zhang Scholarship → Yin Shu



# Outstanding Undergraduate Student Awards - Dr. Gino Lim

*Two of our outstanding undergraduate students received these prestigious awards by Cullen College of Engineering*

❖ *Junior level:*

➤ Rosie Ortiz

❖ *Senior level:*

➤ Maria Sofia Nacinovich



# Outstanding Teaching Assistant Awards - Ms. Michelle Gonzalez

## ❖ The finalists

- An Trinh
- Annie Marin Velasquez (winner)



# Outstanding Teacher Awards - Faraz Ahmed

❖ The winner

➤ Dr. Thomas Chen





# IE Chair Leadership Awards - Dr. Gino Lim

- ❖ These awards are given to students who demonstrated excellence in student leadership.
  
- ❖ The winners:
  - Aubrey Johnson (A Senior in undergraduate IE)
  
  - Koosha Raifee Darmian (Ph.D. student)



# Introduction of Student Chapters - Current

- ❖ **Introduction of IIE Student Chapter Officers** (*Dr. Lawrence Schulze*)
- ✓ Aubrey Johnson - President
- ✓ Tina Tran - Vice President
- ✓ Laura Galvan - Secretary
- ✓ Faraz Ahmed - Treasurer
- ✓ Miguel Morales - Activities Coordinator;
- ✓ Michelle Gonzalez - Membership Coordinator
- ✓ Karim Dayeh – Sports Coordinator
- ✓ Rosie Ortiz - Webmaster





# Introduction of Student Chapters - New

- ❖ **Introduction of IIE Student Chapter Officers** (*Dr. Lawrence Schulze*)
- ✓ Michelle Gonzalez-President
- ✓ Saeid Heidari- Vice President
- ✓ Rosendo Cardoso-Treasurer
- ✓ Areej Radwan- Secretary
- ✓ John Crawford- Activities Coordinator
- ✓ Veronica By- Sports Coordinator
- ✓ Anita Vaezian- Membership Coordinator
- ✓ An Trinh- Webmaster



# PSM Certificates

## - Dr. Eylem Tekin

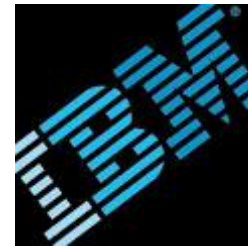
- ❖ **Master of Industrial Engineering with Concentration in Public Safety Management (PSM)**
  
- ❖ **Fall 2013**
  - Mohsen Mirzaei (Fall 2013)
  - Khawar Naeem (Fall 2013)
  - Mahboobeh Yazarloo (Fall 2013)
  
- ❖ **Spring 2014**
  - Ima Moradi (Spring 2014)
  - Shahrzad Ahmadi (Spring 2014)



# Corporate Sponsors

*This event was possible by the generous sponsors like:*

- International Business Machine (IBM)  
(\$2,000)



- Piping Technology and Products  
(\$2,000)





# Photos from the event

