



Upcoming Events

Monthly Luncheon

Date: Thursday, October 14, 2010
Time: 11:30am
Location: Chabuca's
316 W. Nasa Parkway
Webster, TX 77598

Space Economy Career Fair

Date: Friday, October 15, 2010
Time: 9:00am-12:00pm
Location: Hilton Houston NASA Clear Lake
The Atlantis Ballroom
3000 NASA Road 1
Houston, Texas 77058-4322
Phone: (281) 333-9300

More Information:
<http://www.spaceeconomyhouston.com/>

Leadership Brunch and Learn

Date: Saturday, October 16, 2010
Time: 10:00am
Location: La Brisa
501 North Wesley Drive
League City, TX 77573

SWE-Houston Area Lunch and Learn

Come out for an informal lunch to learn about Society of Women Engineers, the Houston Area Section, and network with other area women engineers.
Date: Thursday, October 21, 2010
Time: 11:15am – 12:15pm
Location: Antonio's
1105 Center St.
Deer Park, TX 77536

Happy Hour

Date: Thursday, October 28, 2010
Time: 5:00pm
Location: Chelsea
4106 Nasa Parkway
El Lago, TX 77586

2010 SWE National Annual Conference

Date: November 4-6, 2010
Location: Orlando, FL
More Information: <http://we10.swe.org/>

11th Annual Texas Conference for Women

Date: Wednesday, November 10, 2010
Location: George R. Brown Convention Center
More Information:
<http://www.txconferenceforwomen.org>

More events are listed [online](#).

SWE-TSC Happy Hour with Architects: "Sounds Like" Awesome!



On Thursday, September 23rd, three architects from Houston firms joined SWE-TSC members. The ladies (Valerie Bugayong, Linda Camacho, and Emily Winters) gave an excellent presentation about the process of architecture and its interplay with engineering.

The challenge of the evening was determining how to express the emotive aspects of an architectural design. Customers are good at expressing the concrete aspects of a project they wish to see (how much square footage, etc.), but have a hard time saying what they want the space to "feel" like. The architects introduced a game they used while meeting with clients. They assigned teams of SWE members to explain their design ideas for a classroom of the future.

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Yum-N-Learn



On Saturday September 18th, SWE members and officers met at La Brisa for the first monthly Brunch-N-Learn. We paired a Women's Leadership Coaching webinar on Mentoring with the delicious(!) brunch buffet, followed by an impromptu planning meeting for upcoming events. From the webinar, we learned that we should have several mentors (yes, that's plural) fulfilling these functions:

- **Coach**
- **Appraiser**
- **Advisor**
- **Referral Agent**

A coach should help you develop your skills in the workplace; the appraiser should give you an honest evaluation of your performance and may be your direct manager; an advisor can offer a different perspective and give you advice on professional decisions; and a referral agent can connect you to the resources and people that you need to get ahead. Identify potential mentors and schedule a 20-minute meet and greet with each of them to discuss goals of the relationship and determine if it's a good fit!

Come out to join us for the second monthly Brunch-N-Learn on October 16th for some good food and to hear Georgia Dismukes of Dismukes Consulting on identifying and marketing your transferrable skills when changing jobs or careers.

Become an E-mail Mentor

The price of our success is inspiring, encouraging, and enabling the success of others.

Don't have tons of time to dedicate to mentoring? No problem. Become an e-mail mentor.

Send in a short bio to be distributed to local science and math teachers. Students will choose their mentors and contact them via e-mail. Please include the following information in the bio:

- Where are you from?
- Relate your high school engineering-related experiences (including interest in math/science).
- What/who inspired you to become an engineer (or whatever you are now)?
- Describe your college experience.
- Synopsis of your career (be as elaborate as you want). Include student (co-op/intern) engineering experiences.
- What do you do now (in detail)?

A photo of yourself is optional, but please include some type of picture/graphic.

SWE-TSC Habitat for Humanity Build

Mark your calendars for a day of construction at the Habitat for Humanity site in Dickinson. Lunch will be provided! Interested members should respond to Tess Caswell – tess.e.caswell@nasa.gov.

December 11, 2010 7am-1pm Bring your family!



LEGO Robotics Camp

LEGO Robotics Camp, sponsored by United Space Alliance will be held at Freeman Branch Library on Saturdays October 9, 16, 23 and 30 for children 7-11 years old. There are two sessions: 1-2:30pm and 3-4:30pm.

The robotics program introduces young students to robotics. The students will build LEGO models featuring working motors and sensors, and students will develop their skills in science, technology, engineering and math.

If you would like to volunteer please contact Penny Atkinson: (281-488-1906), 16616 Diana Lane Houston, TX 77062.

There will be a training session for new and returning volunteers on Saturday, October 2nd from 1-3pm.

TRIZ: A Tool for Problem Solving

TRIZ is a Russian acronym meaning "The theory of solving inventor's problems" or "The theory of inventor's problem solving." A Soviet engineer and researcher, Genrich Altshuller, and his colleagues starting developing this in 1946.

TRIZ is a methodology, tool set, knowledge base, and model-based technology for generating innovative ideas and solutions for problem solving. TRIZ provides tools and methods for use in problem formulation, system analysis, failure analysis, and patterns of system evolution. TRIZ, in contrast to techniques such as brainstorming (which is based on random idea generation), aims to create an algorithmic approach to the invention of new systems, and the refinement of old systems.

40 Principles of invention. The "forty principles" of TRIZ are basic engineering parameters of common objects, such as weight, length, and manufacturing tolerances. TRIZ methodology claims that by studying an individual parameter which is causing a problem (e.g., the weight of an object needs to be reduced), and the other parameters which are in conflict with it (e.g., lower weight would require thinner material, which is more likely to undergo catastrophic failure if overstressed), engineering solutions can be created.

More Information:

http://www.gogeometry.com/mindmap/triz_problem_solving_40_principles.html

http://www.triz40.com/aff_Principles.htm

Have article ideas, articles to submit, industry tips, job postings, photos, Texas Space Center engineering marvels, or anything to share in the next SWE-TSC newsletter?

Send them to Irene (irene.chan@swe.org) by **Wednesday, October 20, 2010**

Articles of Interest On the Web

How to Leverage Social Networking to Get Your Next Job

<http://www.theladders.com/career-advice/how-to-leverage-social-networking-to-get-next-job>

50 Most Powerful Women in Business

<http://money.cnn.com/magazines/fortune/mostpowerfulwomen/2010/index.html>

Communication and Women in Engineering

<http://orange.eserver.org/issues/6-4/brown.html>



SWE-TSC Happy Hour with Architects: "Sounds Like" Awesome!

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The game utilized word cards, such as "moves like" and "sounds like," coupled with a variety of photographs. Each team member was assigned the role of teacher, student, administrator, or architect. The goal was to select photographs representing how each team member wanted the space to look, move, feel, or sound, keeping in mind the motivations of their individual roles. Ultimately, the team members worked together to select a subset of cards representing a group consensus on the emotive aspects of the future classroom.

Combining the game with dynamic conversation and delicious food and drink, the evening was a great success. Be sure not to miss the next SWE-TSC Happy Hour!

Courtesy of Kriss Kennedy, Architect and Habitat Demo Unit Project Manager:

Did you know that there already are a number of "space architects" working at NASA? The Habitat Demo Unit (HDU) Project is a good example of several in the aerospace industry. Enclosed are a few links:

AIAA subcommittee on aerospace **architecture** in space and on Earth. www.spacearchitect.org/

Out of This World: The New Field of Space Architecture

<http://www.amazon.com/Out-This-World-Architecture-Library/dp/1563479826>

<http://www.sicsa.uh.edu/>

http://www.shiftboston.org/competitions/moon_jury.html

<http://www.plugin-creations.com/us/ash/>

Saturn V

This month's engineering marvel on the newsletter header has been a permanent exhibit at Space Center Houston since 1977. The Saturn V rocket welcomes you at the start of the tram tour through Johnson Space Center. Only 15 Saturn V rockets were made and 2 of them are exhibited at the NASA centers in Alabama and Florida. The Saturn V here in Houston is currently housed in a facility – within Rocket Park – that was made in 2007 to protect the rocket from the local elements: notorious Houston humidity, longhorns, deer, tropical storms, and a host of other flora and fauna.

The Saturn V is the largest at 363 ft (111 m) and the most powerful liquid-propellant 3-stage rocket (with power equal to the energy created by 85 Hoover Dams) out of all the Saturn rockets built. It stands 60 ft taller than the Statue of Liberty and weighs 13 times more. It was developed under the guidance of Wernher von Braun at Marshall Space Flight Center in Huntsville, Alabama. It was used during the Apollo and Skylab programs from 1967 to 1973:

- In 1968, the Apollo 8 astronauts used the Saturn V to orbit around the moon
- In 1969, the Apollo 11 astronauts made the first landing on the moon with the Saturn V
- In 1973, the last Saturn V was used to launch America's first space station, Skylab, which proved humans can live in microgravity for long durations

Read more about the restoration/preservation of the Saturn V: <http://www.collectspace.com/news/news-030104a.html>

Rocket Park (1698 Nasa Road 1 Houston, Texas 77058) is open to the public daily from 9:00am to 6:00pm (at no charge).

SWE-TSC Candid Shot



With SWE-HA officers at the Houston Komen Race for the Cure Walk. Team SWE reached their fundraising goal and the event, as a whole, broke attendance and donation records (Read the article here:

http://houston.bizjournals.com/houston/stories/2010/10/04/daily2.html?surround=etf&ana=e_article)