WiSE

Women in Science and Engineering

www.usc.edu/programs/wise

Congratulations!

Professor Eva Kanso (Aerospace and Mechanical Engineering) has been appointed the Zohrab A. Kaprielian Fellow in Engineering. The appointment was recommended by the appropriate faculty committee, has been approved by President Nikias and recognizes Eva's exceptional distinction in engineering. Eva joined USC as an assistant professor of Aerospace and Mechanical Engineering in August 2005 and was promoted to Associate Professor in December 2010. Prior to her tenure at USC, she held a two-year post-doctoral position in Control and Dynamical Systems at Caltech. She received her Ph.D. (2003) and M.S. (1999) in Mechanical Engineering as well as her M.A. (2002) in Mathematics from UC Berkeley. Her research interests lie in the areas of Nonlinear Dynamical Systems and Fluid Mechanics with application to aquatic locomotion and fish schooling. She is the recipient of an NSF Faculty Early Career Development award (2007-2012).

Professor **Maja Mataric's** name appeared in Arianna Huffington's article, "Crashing the Silicon Ceiling," the first in a new series on "Women in Tech."

A Photo of USC's Wrigley Institute on Catalina Island.

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To see all the USC WiSE Grant Programs, including ongoing grants without specific deadlines,

WISEPROG@USC.EDU

WISE UPCOMING DEADLINES

Fall Undergraduate Research Awards

Dornsife: August 28
Viterbi: August 1

WISE Faculty Networking Meeting

Meetings held the last Thursday of the month at 12pm in HNB 107; Thursday, July 28, 2011; Bring you own lunch. Cookies, coffee, tea provided.

UCLA Center for the Study of Women
is pleased to announce a special issue of our newsletter:

WOMEN AND STEM: How stereotypes undermine the interest and success of women in science, technology, engineering, and math

The issue features the speakers in the Faculty Curator Lecture Series organized by Jenessa Shapiro, Assistant Professor in the Department of Psychology at UCLA, in Spring Quarter. It includes an overview by Prof Shapiro, a bibliography of research on stereotype threat, and interviews with all the speakers in the series: Steven Spencer, Toni Schmader, Nilanjana Dasgupta, and Joshua Aronson, New York University.

For CSW newsletter, please click here.

Seven Women Named Pew Scholars in the Biomedical Sciences

The Pew Charitable Trusts have announced the 2011 class of Pew Scholars in the Biomedical Sciences. Pew Scholars receive four-year grants of $240,000 to continue their research.

This year 22 researchers were named Pew Scholars from a field of 136 nominations. Of the 22 scholars selected, seven are women (photos below are in order of listing).

For the complete article, please click here.

'Geeky' world of IT loses its appeal as a career choice
By Maija Palmer
Financial Times: Women at the Top
July 06, 2011

View a chart displaying the proportion of the female workforce in selected science professions

There are a host of powerful women in the top echelons of internet companies, including Carol Bartz, chief executive of Yahoo, Sheryl Sandberg, chief operating officer at Facebook, and Marissa Mayer, vice-president of location services at Google. But they remain something of an anomaly.

Women account for just 6 per cent of the chief executives of the top 100 technology companies in the US, and just 22 per cent of the IT workforce overall, according to the National Center for Women & Information Technology. None of the UK's most prominent listed technology companies are run by a woman.

What is more, the participation of women in technology appears to be falling. In the UK, women accounted for just 18 per cent of technology professionals in 2010, down from 22 per cent in 2001.

"I am surprised that the statistics aren't moving upwards," says Wendy Tan White, founder and chief executive of Moonfruit, a UK-based technology start-up that provides services to small and medium-sized businesses. "If you look at Facebook, Groupon and Zynga, some of the fastest-growing technology companies at the moment, most of the customer base is female. It is one of the most fertile times for women to get involved in technology."

Overt sexism or discrimination does not appear to be the problem. "There is nothing institutional that is stopping women. It is not misogynistic," says Alicia Navarro, founder of Skimlinks, an online advertising technology company.

It was never difficult being one of the rare women on her university computer science course or at technology companies, she says. "In my experience, geeks have always been very welcoming of there being more girls in their midst."

However, a culture of long hours and an image of "geekiness" were some of the key concerns raised by women surveyed by Intellect, the trade body for UK technology companies, earlier this year.

Juliet Tzabar, chief executive of Plug-In Media, a digital media production company, acknowledges that she would find it hard to balance family life and a technology job if she did not run her own company. "I can pick up my kids from school two or three times a week," she says. "It is very finely balanced, but it works. I am not sure I would be able to do that as an employee."

For the full article, please click here.

Many Firsts for Women in NASA's Space Shuttle Program
By Linda Lowen
About.com Guide
July 8, 2011

If the Trekkies hadn't already embraced it as a catchphrase, "Space: the final frontier" might have been a rallying cry for the women's movement in the 1970s as the United States' space exploration program opened doors to women in science that had long been shut.

As the anticipated final launch of the Atlantis closes the book on this most recent chapter of America in space, it's important to reflect on how the space shuttle program helped shrink the gender gap in the US.

Most of us who were around in the 1960s thought only men could go into space. This truth was communicated to us through the evening news as we saw film clips of all-male astronaut teams. Even silly sitcoms like I Dream of Jeannie, with Barbara Eden's midriff-baring outfit and a pre-Dallas Larry Hagman as astronaut Tony Nelson, showed us that a woman's place was in a decked-out "Arabian Nights fantasy" bedroom-in-a-bottle, not inside a rocket aimed at the stars.

Many women over the years changed our perceptions, and the space shuttle program offered them that opportunity.

The first was Sally Ride, NASA's first American woman in space. Ride has just finished her Ph.D. in Astrophysics at Stanford when she was one of 1,000 women who applied to NASA after the agency announced it wanted scientists and technicians for its space shuttle program. Out of a total pool of 8,000 applicants, Ride was one of six women chosen in 1978 as a part of a 35-member astronaut training program. Twenty-two years after the US launched its first manned space flight, Sally Ride went into space in 1983 on the 6-day Challenger mission -- the seventh space shuttle flight. Ride was also the youngest American in history to enter space.

While Ride worked as a mission specialist on her first flight, Eileen Collins was the first woman to pilot a spacecraft. She was at the controls of the shuttle Discovery on its 8-day mission in February 1995 which included the first space rendezvous with the Russian space station Mir. Four years later, Collins scored another historic first for women as the first female space shuttle commander when she helmed the Columbia in 1999.

Other firsts:

   * Kathryn Sullivan as the first woman to walk in space aboard the Challenger on the 13th space shuttle flight

   * Christa McAuliffe was America's first "teacher in space" and a civilian astronaut scheduled to teach two lessons from space when she died in the space shuttle Challenger explosion seconds after take-off in January 1986.

For the full article, please click here.

This Could Be the New Face of Computer Science
By Candice Reed
San Diego Reader
July 8, 2011

So ladies, are you tired of everyone telling you should go into teaching or nursing because, well, you know, you're a girl? And pretty?

Well those professions are perfectly wonderful careers. But if you want to make some actual bucks and compete with the big boys, you need think about computer sciences if you want a job waiting for you after you graduate from college.

That's right; the computer science field is for girls too.

Did you know that a woman named Ada Lovelace is considered to be the first ever computer programmer? Probably not, but it just goes to show that women are just as smart as the next guy.

Computer science grads from the University of Illinois at Urbana-Champaign are being recruited by software, healthcare, trading and agricultural companies. Last year's grads received an average of 2.3 job offers and had an average starting salary of more than $72,000 – the highest of any starting salary in the university's College of Engineering.

Right, and if you can actually land a teaching job it pays how much?

"Computer sciences is where the money is," says Kelly Ball a USC senior who switched her major from business to computer science her second year of college. "I thought I might find a great job as an investment banker after graduation, but it's just not a safe career anymore."

Demand for technology positions tends to stay fairly consistent, even during a recession, but women are just starting to catch on to this logical career.

While many women fear that jobs in computer science consist of sitting in an isolated cubicle, wearing a pocket protector, and staring into a screen while writing computer code all day, they need to think again.

For the full article, please click here.

International and Forbes-Ranked Technology Providers Take on Women in IT
CyrusOne and CDW Host Event for Women in IT on July 21st

BusinessWire.com
July 08, 2011 09

HOUSTON--(BUSINESS WIRE)--International enterprise data center colocation provider CyrusOne and CDW, Forbes-ranked technology solution provider, have teamed up to take on an unsung voice in the technology industry, women. Traditionally a male-dominated profession, information technology has seen an influx of women in the workplace but particularly in leadership roles. According to the U.S. Bureau of Labor Statistics, women held 25 percent of computing-related occupations in 2009. Since the 2007-08 school year, 18 percent of women obtain a computer information systems degree.

"By hosting this event, our goal is to bring together women in the information technology sector to raise awareness around the career opportunities available and to discuss challenges faced as women in the industry"

"By hosting this event, our goal is to bring together women in the information technology sector to raise awareness around the career opportunities available and to discuss challenges faced as women in the industry," said Dottie Spruce, Executive Vice President, Business Development, CyrusOne.

"I travel nationally for CDW, and Texas is my favorite CDW services branch location because I'm always thrilled by how many meetings I attend with graceful and strong female leadership at the table. It's been an inspiration to me and is a testament to the power of women in IT leadership in Texas," said Brooke Guthrie, Senior Manager of Managed Services Product and Business Management for CDW.

This event, "Women in IT Leadership", will open with a presentation focused on maximizing the return on investment for IT initiatives, followed by a moderator-led panel discussion featuring: Dolly Wagner-Wilkins, SVP Enterprise Operations, Sabre Holdings, Jill Bill Horn, VP of Sales, CDW, and Alison Gleeson, VP of US Commercial Sales, Cisco. The event will conclude with cocktails and time for networking.

The Women in IT Leadership event will begin at 4:00pm on July 21, 2011 at Nick and Sam's in Dallas. Women from all IT backgrounds manager-level and up are invited to attend. More information and registration is available at www.cyrusone.com.

About CyrusOne

CyrusOne specializes in enterprise data center colocation, offering the highest power redundancy (2N architecture) and highest power-density infrastructure, supporting 250+ watts per square foot across the entire data center floor. Headquartered in Houston, Texas and with 17 facilities across the United States and in the United Kingdom, CyrusOne is renowned for exemplary customer service. The company's customers include 15 of the Top Global 100 Companies, five of the top 10. CyrusOne is a wholly-owned subsidiary of Cincinnati Bell (NYSE: CBB). For more information, visit www.cyrusone.com.

For the full article, please click here.

CRASHING THE SILICON CEILING: INTRODUCING HUFFPOST'S "WOMEN IN TECH" SERIES

Arianna Huffington

The Huffington Post

July 6, 2011

The tech sector has traditionally been a boy's club. But a growing number of women are disregarding the "No Girls Allowed" sign and are not only infiltrating the tech world -- but, increasingly, influencing and leading it.

This crashing of the silicon ceiling is cause for celebration -- and the launch of a new HuffPost series, "Women in Tech." Over the next few weeks, with a sponsorship from Dell and Intel, our Tech section will be spotlighting some of the most skilled and innovative women having an impact on today's tech scene.

Through exclusive interviews, video, slideshows, and Q&As, "Women in Tech" will provide a glimpse into the lives and minds of these game-changers -- from their big-picture thoughts to their favorite gadgets, apps, and people to follow on Twitter.

Among those we'll be profiling are Marissa Mayer, Google's brilliant young vice president of location and local services (not to mention the company's first female engineer), and Susan Lyne, chairman of Gilt Groupe, whose aim of recreating the excitement of a sample sale online is a close cousin to HuffPost's goal of giving readers a sense of occasion when they come to our site. Alexa von Tobel, who has previously shared her advice with HuffPost readers about launching a company during a recession, will fill us in on LearnVest, the online personal finance resource for young women she founded just a few years out of Harvard (where she lived in the same dorm as another budding techie: Mark Zuckerberg). We'll also turn the spotlight on Jennifer Hyman, CEO of Rent the Runway; Beth Simone Noveck, former White House deputy chief technology officer; Twitter's Erica Anderson; and NASA astronaut, Tracy Caldwell Dyson, among others.

Above and beyond their professional successes, these women embody the spirit of Biz Stone's declaration that Twitter "is not a triumph of technology, it's a triumph of humanity" -- and the growing consensus that success includes doing well for others. For example, Maja Matarić who, as founding director of the University of Southern California's Center for Robotics and Embedded Systems, has channeled her technical expertise into making a difference, creating robots that help victims of strokes, Alzheimer's, and autism.

HuffPost Tech has always promoted the accomplishments of women innovators, such as Ada Lovelace, the woman sometimes called "the Founder of Scientific Computing" -- and has featured the work of an array of amazing female bloggers, including Sheryl Sandberg, Ellen Miller, Danah Boyd, Susan Landau, Esther Dyson, Lisa Stone, Lee Woodruff, Marlo Thomas, and Esther Wojcicki.

Nevertheless, "Women in Tech" is built on the knowledge that there's more progress to be made. Marissa Mayer estimates women still only account for 15 to 17 percent of engineers in Silicon Valley.

By celebrating the accomplishments of those women currently blazing trails in tech, we hope this series will inspire more women to consider a career in the field. But no matter what gender you are or your place on the tech spectrum -- from Luddite to programming whiz -- "Women in Tech" will introduce you to some incredible women and their insights into this indispensable aspect of all our lives. Check out the first installment here. (See next article in newsletter)

For the original article, please click here.

Google Exec Marissa Mayer Explains Why There Aren't More Girl Geeks

Bianca Bosker
Huffington Post
July 6, 2011

In 1999, Marissa Mayer, then a recent Stanford University graduate, joined a little-known startup with fewer than 20 employees that she calculated as having a two percent chance of success: Google.

Now, as a senior executive with the search giant, Mayer is one of the most powerful women in Silicon Valley. Her work at Google influences how hundreds of millions of people access information on the web and she plays a key role in shaping Google's most important products, from the look and feel of its homepage to popular features like Google News and Gmail, as well as its more recent forays into location-based services.

One of the most iconic women in tech today, Mayer's career path offers lessons for how to attract more women to a male-dominated field and undermines the assumption that to foster more female techies, it's early or never. Mayer, who calls herself a "proud geek," did not grow up obsessed with computers -- she bought her first one in college -- or with dreams of becoming the next Bill Gates. She wanted to be a pediatric neurosurgeon.

Mayer credits Stanford's "exorbitant" tuition fees with turning her on to tech. Frustrated with how much more she was paying to take the same courses and memorize the same chemistry facts as her peers attending less expensive colleges in her home state, Wisconsin, Mayer switched to a major that would let her take advantage of courses and faculty only offered at Stanford: symbolic systems, a blend of psychology, linguistics, philosophy and computer science.

Even after the switch, working at Google was not an obvious pick for Mayer. "I like to overwhelm myself with choice," she said. She received 14 job offers, and in an effort to choose between them, she created a matrix ranking how each position compared across a slew of characteristics, including location, salary, lifestyle index, career trajectory and predicted happiness on a scale of one to ten.

The Google Mayer was considering joining after graduation was a far cry from the powerhouse it is today. The company had just grown out of its office in a Menlo Park garage and was up against over a dozen more established search engines, such as AltaVista and Yahoo, that themselves had trouble eking meaningful revenues out of online queries. Then there were the workplace demographics to consider: there was not a single other female engineer -- Mayer would become Google's first -- and she would be one of fewer than two dozen employees.

The other position Mayer was most seriously weighing was with McKinsey & Company, a prestigious consulting firm with a distinguished lineage and dozens of alumni who went on to become the CEOs of Fortune 500 firms. It had smart people, more women and a strong track record.
Story continues below

Unable to decide, Mayer recruited an economist she knew to help analyze her options. The night before she ultimately accepted Google's offer, Mayer spent more than four hours with her friend graphing and charting the pros and cons of the jobs. Frustrated, she eventually collapsed in tears. Her friend then gave her what she says is still the best advice she has ever received -- advice that ultimately convinced her to pick the burgeoning search engine company over McKinsey.

For the full article, please click here.

Animals as our Engineering Inspiration- July 11 – 15, 2011 Ages: 6-9

When attempting to create manmade flying machines, both Leonardo da Vinci and the Wright brothers studied the way birds fly! Today, scientists and engineers continue to study animals to get inspiration for new inventions and technologies. Children will learn how animals are inspiring new technologies from airplanes to wind turbines. Hands-on projects allow children to practice bio-inspired engineering!

Musical Instrument Engineering- July 18 – 22, 2011 Ages: 6-9
Musical instruments create sound by vibrating in different ways. Children will investigate the physics of sound using musical instruments that they create. They will learn how sound is made and how sound travels through different materials.

Playful Inventions August 1 – 5, 2011- Ages: 8-12
Playful Invention is an approach to using new technologies that integrates art, science, and engineering. The goal is to enable children to create, invent, and explore. This course will teach computer programming using the PicoCricket Kit. Participants will design and program their own artistic creations with lights, sound, music, and motion.

Each course has five sessions and will last through the week.

Email or call (424) 241-2649 if you have any questions.

For more information, visit: http://iridescentlearning.org/la-calendar/