

*A service of the Oregon Pre-Engineering & Applied Sciences Initiative (OPAS)*

To subscribe or get more info, please contact Jo Oshiro - [jo\\_oshiro@ous.edu](mailto:jo_oshiro@ous.edu) or 503.725.2910  
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**Jobs**

- OMSI has a special project (part-time, temporary) position opening in the Evaluation and Visitor Studies division, described at <http://www.oms.edu/info/employment/jobs.cfm?jobid=437>. Interested individuals can apply with OMSI's Human Resources Department. Please check it out or help spread the word.
- The Science Museum of Minnesota has posted an opening - #2007-832 EVALUATION AND RESEARCH ASSOCIATE, Exhibits, (Full Time/ Exempt). EEO 2 at [www.smm.org](http://www.smm.org)

**Events – Announcements**

- **Call for Volunteers – MESA Day at PSU Friday May 9 -**  
[http://www.mesa.pdx.edu/mesa\\_day.htm](http://www.mesa.pdx.edu/mesa_day.htm) - Volunteer as little as two hours helping with Trebuchets, Balsa Wood Bridges, On-Site Design-Strawkets Competition, Egg Drop Event, and Math Scavenger Hunts.
- **George Fox University Annual Engineering Expo, Friday, April 18th**, from 3:30-6:00 PM at George Fox University. The Engineering class project presentations will be from 3:30-4:30 PM and the Industry-sponsored Senior design presentations will be from 4:30-6:00 PM. They will be giving away a free iPod nano this year to a high school student!!! Need more info? Contact Lynn Scott, lscott [ at ] georgefox.edu.
- **More on PSU's Engineering Discovery Showcase, May 14, 2008 2:30 – 5:00**
  - Registration form –  
[http://opas.ous.edu/Events/MCECS\\_Eng\\_Showcase\\_Registration\\_2008.pdf](http://opas.ous.edu/Events/MCECS_Eng_Showcase_Registration_2008.pdf)
  - Postcard flyer – some fantastic photos -  
[http://opas.ous.edu/Events/MCECS\\_Eng\\_Showcase\\_Postcard\\_2008.pdf](http://opas.ous.edu/Events/MCECS_Eng_Showcase_Postcard_2008.pdf)
  - Photorelease form –  
[http://opas.ous.edu/Events/MCECS\\_Eng\\_Showcase\\_PhotoRelease\\_2008.pdf](http://opas.ous.edu/Events/MCECS_Eng_Showcase_PhotoRelease_2008.pdf)
  - Weblink – [www.pdx.edu/cecs/outreach](http://www.pdx.edu/cecs/outreach)
  - More questions? Contact Kristin Nieman at PSU – [krisc@cecs.pdx.edu](mailto:krisc@cecs.pdx.edu)
- **Another teaser for OSU's Engineering Expo, May 9, 2008 1:00 – 5:00**
  - Weblink - <http://engr.oregonstate.edu/expo2008/>
  - Need more info? Contact Brett McFarlane at OSU -  
[Brett.McFarlane@oregonstate.edu](mailto:Brett.McFarlane@oregonstate.edu) or Ellen Momsen at OSU -  
<mailto:ellen.momsen@oregonstate.edu>.

**Events – Wrap-Up**

- Trip Report: Jo takes the OSU College of Engineering Tour and talks with some current engineering students -  
[http://opas.ous.edu/Committees/Resources/Staff\\_papers/Trip\\_Report\\_OSU\\_COE\\_Tour\\_022908.pdf](http://opas.ous.edu/Committees/Resources/Staff_papers/Trip_Report_OSU_COE_Tour_022908.pdf)

**Weblinks/Articles**

- EdWeek's special annual report *Technology Counts 2008: STEM: The Push to Improve Science, Technology, Engineering, and Mathematics* is now online at <http://www.edweek.org/ew/toc/2008/03/27/index.html> -- "Competing for Competence"

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details the use of competitions to enhance STEM education

<http://www.edweek.org/ew/articles/2008/03/27/30contest.h27.html>. ALL edweek.org content is totally free through April 7.

- Oregon didn't do well in the Technology Counts report card, above, and there is a rebuttal here:  
<http://www.oregonlive.com/education/oregonian/index.ssf?/base/news/1206588311134010.xml&coll=7&thispage=2>. In short, if the model under which you operate does not match the assessment model, things may look worse than they are – but we still have plenty of room to improve.
- More from EdWeek –“**Probeware on Increase in School Science Labs**” –that’s automated measuring and monitoring equipment such as provided by Oregon’s Vernier Technology --  
[http://www.edweek.org/ew/articles/2008/03/26/29tech\\_ep.h27.html?tmp=211075409](http://www.edweek.org/ew/articles/2008/03/26/29tech_ep.h27.html?tmp=211075409).
- Four Ohio universities receive STEM funding: Ohio's [Beacon Journal](http://www.beaconjournal.com) (3/21, Byard -  
<http://www.ohio.com/news/16860701.html>) reports that the University of Akron (UA), Lorain County Community College (LCCC), Baldwin-Wallace College and the Stark State College of Technology have been awarded \$6.5 million through the Choose Ohio First Scholarship program. The purpose of the program is to attract and retain students in science, technology, engineering and mathematics (STEM). According to Rex Ramsier, a UA associate provost, "[a]bout 800 students -- spread among the four schools -- will receive scholarships over a five-year-period." The Beacon Journal notes, however, that the four "schools have yet to determine how the \$6.5 million will be divided" between them. "The Ohio General Assembly created the scholarship program last year," and Ramsier noted that the "primary driver for this is stimulating the economy of Ohio." Ramsier said that if more people are trained for "[h]igh technology and knowledge-based careers," the state is more likely to attract additional business.
- Saul Griffith's column Making Trouble: "**Intern, Get Me a Campari! Why Summer Internships are More Important than Ever Before.**", MAKE magazine, Volume 12. Linked here with the gracious permission of the publishers -  
[http://opas.ous.edu/Committees/Resources/Articles/MAKE\\_saulcolumn12.pdf](http://opas.ous.edu/Committees/Resources/Articles/MAKE_saulcolumn12.pdf). If you haven't seen MAKE, check it out on-line at <http://makezine.com/magazine/> or at your local bookstore – it’s a treasure trove of arcanelly entertaining DIY.
- “Science Testing in the Spotlight. New testing rules and poor science achievement scores, are bringing renewed focus and energy to science instruction in schools “ as science testing under NCLB comes into effect -- <http://www.eschoolnews.com/news/top-news/index.cfm?i=53031; hbguid=93197112-b5f4-4154-85e0-a7cd97f9911d>

### *Computer Science Curricula*

- **Computing Curricula for the 21st Century**  
IEEE Distributed Systems Online (02/08) Vol. 9, No. 2, Kornecki, Andrew J.

As the role of software and computing grows in all areas of technology and human endeavor, it is vital that engineers are trained to understand systems holistically and take into account software, hardware, and their mutual interaction, writes Embry-Riddle

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Aeronautical University computer science professor Andrew J. Kornecki. The majority of computing-education programs emphasize theoretical foundations and programming skills, while placing little if any concentration on practical facets of hardware-software interactions and the real-time dependable-systems development methods that the industry demands – read more at [http://dsonline.computer.org/portal/site/dsonline/menuitem.9ed3d9924aeb0dcd82ccc6716bbe36ec/index.jsp?&pName=dso\\_level1&path=dsonline/2008/02&file=o2002edu.xml&xsl=article.xsl&](http://dsonline.computer.org/portal/site/dsonline/menuitem.9ed3d9924aeb0dcd82ccc6716bbe36ec/index.jsp?&pName=dso_level1&path=dsonline/2008/02&file=o2002edu.xml&xsl=article.xsl&)

***Fun Stuff***

- **Project New Media Literacies** a research initiative within MIT's Comparative Media Studies program whose central goal is to engage educators and learners in today's participatory culture. The Project believes that young people need to both make and reflect upon media and in the process, acquire important skills in team work, leadership, problem solving, collaboration, brainstorming, communications, and creating projects. Their newly updated website is at <http://newmedialiteracies.org/>
- IBM's free multiplayer online game, PowerUp is at <http://www.powerupthegame.org/>. The game challenges teenagers to help save the planet "Helios" from ecological disaster. It is part of IBM's TryScience initiative, which encourages students to investigate, discover, and try science by linking it to engaging, real-world activities.
- **Discovery Channel Young Scientist Challenge**, grades 5 – 8: <http://youngscientist.discoveryeducation.com/> - Create a short (1-2 min.) video about one of this year's scientific topics and win a trip to Washington, DC to compete in the YSC finals, billed as "the Ultimate Science Fair". The program has served 540,000 middle schoolers since 1999. Finalists compete in on-the-spot scientific problem-solving, some before a live audience. Entries due June 15.
- **Flaming Rubber Duckies Rule** – The Oregon Robotics Tournament and Outreach Program FIRST LEGO League Champion Team the Flaming Rubber Duckies, five girls in elementary and middle school, have been nominated for the FIRST LEGO League World Festival Core Values Team and will compete at the FLL World Festival in Atlanta, Georgia. Two (middle school) team members petitioned to enter their project on optimization of NXT robots within the constraints of FLL competition at the high school level Northwest Science Expo. They won a High School IEEE Special Award Sponsored by IEEE Oregon and will continue on to international competition, again returning to Atlanta. Congratulations Rubber Duckies! Flame on!