



Heavy Metal, Dr. Tapia's award-winning car



Computing Scholars
of Tomorrow
empoweringleadership.org

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Web Links Referenced in Dr. Tapia's letter:

<http://www.tapiaconference.org/2011/participate.html>
Website to apply for scholarships and submit posters/doctoral consortium to Tapia conference

<http://chronicle.com/article/Black-Computer-Scientists-in/124447/?key=T212IQ>
Article co-written by Juan Gilbert: "Black Computer Scientists in Academe: an Endangered Species?"

<http://www.eecs.berkeley.edu/IPRO/cseducationday/>
Computer Science Education Day at UC Berkeley

A Letter from Richard A. Tapia

Dear Empowering Leadership Alliance Community,

As the New Year approaches, it marks a time for new beginnings and great opportunities for the EL Alliance members. A large portion of this newsletter is dedicated to sharing the numerous opportunities for undergraduates, graduate students, as well as post-doctorate students.

However, the most exciting upcoming EL Alliance event is the **2011 Richard Tapia Celebration of Diversity in Computing Conference** on April 3-5, 2011 at the Fairmont Hotel, San Francisco, California. I strongly encourage you to answer the call for participation at <http://www.tapiaconference.org/2011/participate.html> where you can now apply for scholarships to attend. Questions about submissions can be sent to tapiacnf2011@gmail.com. In addition to the main conference, ELA will host a national meeting on Sunday, April 2; look for details soon. We hope to see you in beautiful San Francisco!

I would like to share with you an event I am involved in each year. Our Rice Center for Excellence and Equity in Education also sponsored for the fourth consecutive year a Student Day AutoRama where I combine my love of cars with my love for mathematics and share them both with area middle school and high school students. Thus, the photo of my car is displayed at the top corner of this newsletter.

My message to you is to share your passion for science and engineering with others, especially those younger than yourself. Juan Gilbert, an ELA leader and partner, co-wrote an excellent article in The Chronicle of Higher Education called "Black Computer Scientists in Academe: an Endangered Species?" He urges us to "treat the entire pipeline" including students in elementary and high schools. UC Berkeley, another of our ELA partners is sponsoring a Computer Science Education Day in December to help celebrate Computer Science Education Week. You can learn more at <http://www.eecs.berkeley.edu/IPRO/cseducationday/>.

If you would like to write and let me know of interesting activities with which you are involved, as always, I enjoy hearing from you. Enjoy your winter holidays.

Sincerely,
Richard A. Tapia

Principal Investigator, EL Alliance
rat@rice.edu

So Many REU Opportunities...Plan Your Summer Now!



This is prime time to apply for summer research intern programs. Participating in a REU program is a way to not only obtain research experience, but travel to a different part of the country, meet interesting people, and get paid as well!

*A good starting point is at the **National Science Foundation Computing and Information Science and Engineering Research Experiences for Undergraduates (REU)**

http://www.nsf.gov/crssprgm/reu/list_result.cfm?unitid=5049

Another great resource is the **Institute for Broadening Participation: Pathways to Science

For Undergraduates: Paid Summer 2011 Undergrad Research Placements:

Over 400 programs - REU and Other Summer Research Opportunities for Undergrads

<http://www.pathwaystoscience.org/Summerresearch.asp>

If you have any questions, contact Susie Valaitis 207-563-5929 phone,
svalaitis@ibparticipation.org

*** Check out the **CRA-W/CDC Distributed Research Experiences for Undergraduates (DREU) Program** is sponsoring a summer 2011 paid research internships for underrepresented students.

The objective of the DREU is to increase the number of women and students from underrepresented groups entering graduate studies in the fields of computer science and engineering. Funding for the student consists of \$6000 for the summer (10 weeks), plus relocation travel assistance when appropriate. The application deadline is February 15, 2011. Find out more and apply at <http://parasol.tamu.edu/dreu/> or contact the DREU Co-Directors at dreu@cse.tamu.edu if you have any questions.

**** Don't miss out on these opportunities at **Caltech!**

i) **The MURF Undergraduate Research Fellowships program** aims to increase the participation of underrepresented students in science and engineering Ph.D. or M.D./Ph.D. programs and to make Caltech's programs more visible to students not traditionally exposed to Caltech.

Eligibility: Students must be current sophomores through non-graduating seniors and must be U.S. citizens or U.S. permanent residents. A minimum GPA of 3.0 is required.

Support: MURF students will receive a \$6000 award for the ten-week program. Additional housing and travel support may be provided.

Other Web Links to Opportunities

<http://www.pathwaystoscience.org/Grad.asp>

For Financial Support in Graduate Schools: Bridges, GK-12, IGERT and NSF Grad Research Fellowship programs provide generous stipend and tuition support for students through the National Science Foundation

http://www.pathwaystoscience.org/Postdocs_portal.asp
For post-doc opportunities

<http://intern.nasa.gov/>
For NASA-supported internships, fellowships and scholarships

Contact Us

<http://www.empoweringleadership.org>
afisher@rice.edu

Application: Online applications are due January 12, 2011. For more information, please visit www.murf.caltech.edu

ii) **Caltech's Amgen Scholars Program** is geared towards students in biology, chemistry, and biotechnology fields.

Eligibility: Students must be current sophomores through non-graduating seniors, must be attending a four-year university, and must be U.S. citizens or U.S. permanent residents. A minimum GPA of 3.2 is required.

Support: Amgen Scholars will receive a \$5500 award, round-trip air transportation, a generous housing allowance, and a food allowance.

Application: Online applications are due February 15, 2011. For more information, please visit www.amgenscholars.caltech.edu or questions about both of these programs can be directed to Carol Casey at casey@caltech.edu or (626) 395-2887.

*****For those of you in graduate school or interested in applying, here are a couple announcements...

The 2011 CRA-W Grad Cohort Workshop will be held on April 1-2, 2010 in Boston, MA.

CRA-W is announcing the formation of the 2011 Grad Cohort for Women. Cohort activities will kick off with a workshop April 1-2, 2011 in Boston, MA. This workshop is the cornerstone of CRA-W's Grad Cohort Program to increase the ranks of senior women in computing by building and mentoring nationwide communities of women during their graduate studies. Travel expenses, meals and lodging will be provided for students chosen to participate in this program.

Eligibility: Women students in their first, second or third year of graduate school in computer science and computer engineering or a closely related field

Application Deadline: January 15, 2011. For more information and to apply for the Grad Cohort program, go to <http://www.cra-w.org/gradcohort>

Georgetown University Computer Science Department is hosting an Open House event on December 10th.

The event will provide prospective graduate students information on faculty and their areas of research and expertise, graduate programs--their requirements and the application process, and job opportunities for graduates of the programs. For more information and to RSVP, contact Rahama Wright at rsw34@georgetown.edu, phone number: 202-687-1793 or Professor Maloof at maloof@cs.georgetown.edu.

Inspiring Leader – Dr. Patty Lopez



Biography:

Component Design Engineer, Intel

Patty Lopez spent 19 years as an Imaging Scientist for Hewlett Packard, creating and transferring technology in imaging and color algorithms into scanner, camera, and all-in-one products. She has released over fifty imaging products for HP and holds seven imaging patents, and served on the organizing committee for the HP Imaging and Color Symposium for several years.

Patty joined Intel in Fort Collins, Colorado in August 2008 and now works on microprocessor logic validation for manufacturability. Patty graduated with high honors from New Mexico State University with a B.S. in Computer Science and earned her M.S. and Ph.D. in Computer Science at while working at NMSU's Computing Research Laboratory, a state funded center of technical excellence.

In 2001, Patty received the HP Technical Leadership Award for her imaging work. She served as the HP Campus Recruiting Manager for NMSU for ten years, building relationships with academia and K-12 schools to obtain grants for equipment and outreach. In 2003, Patty was named a Distinguished Alumna for the NMSU College of Arts and Sciences, Sciences Division. She chairs the Governance Committee of the NMSU Foundation, has established the Ross & Lydia Lopez Minority Scholarship, and serves an advisory board member for several departments and programs at NMSU. She joined the Computing Alliance of Hispanic Serving Institutions (CAHSI) Board and the CRA-W Board in 2010, and represents Intel on the Anita Borg Institute Advisory Board and the Grace Hopper Celebration of Women in Computing Industrial Advisory Board.

She has served as co-chair for the GHC Birds of a Feather Committee in 2009, co-chair of the GHC Technical Poster Session Committee in 2010, and will serve as the co-chair of the GHC Panels and Workshops Committee for 2011. She is a founding member and co-chair of Latinas in Computing, a grassroots organization whose mission to promote and develop Latinas in technology, and received the HENAAC/Great Minds in STEM Community Service Award in 2010. Patty is the current VP of the Women at Intel group in Fort Collins, is a MentorNet mentor, and is a member of the NCWIT Workforce Alliance. Her current passion is computer science education, building the STEM pipeline for K-16, and creating an inclusive organizational culture in the workplace. Patty was profiled on Ada Lovelace Day at <http://anitaborg.org/news/archive/ada-lovelace-daypatty-lopez-component-design-engineer-intel/>.

UT Austin ELA Chapter Research Project

A group of eight ELA students and one professor at The University of Texas received a grant from the National Science Foundation (NSF) to conduct undergraduate research. The students are developing an iPhone application, which will keep individuals across the world informed on current and previous natural disasters. In the past few decades, the media has shifted trends in delivering news. Today, the average news story garners attention for approximately five days before it is considered “old news.” The main goal of creating the application is to educate the world on important catastrophes that are still affecting individuals across the world, as “old news” does not fade in the affected communities. This will be done by collecting current articles and testimonials of the hardships witnessed by the individuals affected and showing them on the application. The application will also have an option of donating to any catastrophe or issue listed and will provide an opportunity to change the world, one donation at a time. The students will plan to present a poster at the 2011 Tapia conference.