Welcome CAP Executive Board
CAP Leadership 2011 - 2012

CAP Chairman:
Anton Monk, Ph.D. UCSD ‘94
Co-founder & VP Technology
Entropic Communications

CAP Vice Chairman:
Rusty Sailors
Chief Project Engineer, Director
BAE Systems
Welcome New CAP Members!

GE

imagination at work

KAISER PERMANENTE
Welcome Distinguished Students

Triton Engineering Student Council

Women in Computing

Engineers for a Sustainable World
Congratulations

NEW TESC President 2012-13
Pooja Makhijani, BioEng `14

http://tesc.ucsd.edu/
Highlighted Events

• EUReKA 2012
• Enspire
• Junkyard Derby
DECaF 2012

• Over 80 Companies attended
• Date for Next Year: February 22\textsuperscript{nd} 2013
• Two Ballrooms for 2013
Goals for 2012-13

- Engineers on the Green
- Org Collaboration Initiative
- Opening up resources
- MOMENTUM

- Creating a Thriving Engineering Student Community
Celebration of Women in Computing Conference

- April 14–15
- Workshops, poster sessions, career panel, career fair, keynote speaker, dance party
- 1/3 of the conference attendees from UCSD
Grace Hopper Conference 2012
October 3 - 6

• Goal - Full funding for 15 WIC members: $16,000
• Thank you to Yahoo, Cisco, and Microsoft for their generous donations amounting to $12,500!
Future Events for 2012 - 2013

- Bi-Weekly social events
- Big sister/little sister mentoring program
- C++ and Python workshops
- Web development classes
- WIC hosted programming contest
- Strong WIC presence at Dini Group programming contest
- Technical project teams
Contact us!

- Eliah Overbey – President
eoverbey@ucsd.edu

- Liz Chaddock – Vice President
echaddock@ucsd.edu

- Visit our website at
  wic.ucsd.edu
Engineers for a Sustainable World
A Student Organization at University of California, San Diego

Bringing communities together to develop, implement, and share sustainable technologies and practices worldwide.

Hien Nguyen, ME ’12 | hien.nguy3n@gmail.com
What we’ve **accomplished** this year:

- 15 student-run projects
- 55 active members
- 3 huge community-building events
Engineers for a Sustainable World

esw.ucsd.edu

Coming soon...

2012-2013

National Conference at UC San Diego!

“What’s our Legacy?”

Interested in Joining? esw.ucsd@gmail.com
Structural and Materials Engineering Building

Dedication September 14, 2012
“Fallen Star” UCSD Stuart Collection

Becoming an Iconic Symbol of UCSD Campus
## Academic Year 11-12 Faculty Hiring Plan

<table>
<thead>
<tr>
<th>DEPARTMENT</th>
<th>SPECIALTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENERGY/SUSTAINABILITY</td>
<td></td>
</tr>
<tr>
<td>1. Electrical &amp; Computer Engineering</td>
<td>Energy/Power</td>
</tr>
<tr>
<td>2. Mechanical &amp; Aerospace Engineering</td>
<td>Energy</td>
</tr>
<tr>
<td>4. Structural Engineering</td>
<td>Aviation Safety</td>
</tr>
<tr>
<td>5. Jacobs School-wide</td>
<td>Advanced Energy Technology</td>
</tr>
<tr>
<td>ENGINEERING IN MEDICINE</td>
<td></td>
</tr>
<tr>
<td>7. Bioengineering/Burnham</td>
<td>Regenerative Medicine</td>
</tr>
<tr>
<td>8. Jacobs School-wide</td>
<td>Quant/Systems Biology</td>
</tr>
<tr>
<td>INFORMATION TECHNOLOGY</td>
<td></td>
</tr>
<tr>
<td>9. Electrical &amp; Computer Engineering</td>
<td>High Fidelity Info Access</td>
</tr>
<tr>
<td>10. Computer Science &amp; Engineering</td>
<td>HCI/Computing and Machines</td>
</tr>
<tr>
<td>OPPORTUNITY</td>
<td></td>
</tr>
<tr>
<td>11. Jacobs School-wide</td>
<td>Excellence</td>
</tr>
<tr>
<td>12. NanoEngineering</td>
<td>Teaching Professor</td>
</tr>
</tbody>
</table>
Freshman Accepts by Department

Jacobs School New Freshman Enrollment

Updated June 11, 2012
<table>
<thead>
<tr>
<th>Dept.</th>
<th>Admit</th>
<th>Accept</th>
<th>Yield</th>
<th>Admit</th>
<th>Accept</th>
<th>Yield</th>
<th>Change</th>
<th>% of 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOE</td>
<td>753</td>
<td>157</td>
<td>21%</td>
<td>627</td>
<td>145</td>
<td>23%</td>
<td>-12</td>
<td>92%</td>
</tr>
<tr>
<td>CSE</td>
<td>802</td>
<td>166</td>
<td>21%</td>
<td>1,339</td>
<td>428</td>
<td>33%</td>
<td>262</td>
<td>258%</td>
</tr>
<tr>
<td>ECE</td>
<td>660</td>
<td>128</td>
<td>19%</td>
<td>918</td>
<td>226</td>
<td>25%</td>
<td>98</td>
<td>177%</td>
</tr>
<tr>
<td>MAE</td>
<td>947</td>
<td>188</td>
<td>20%</td>
<td>937</td>
<td>187</td>
<td>20%</td>
<td>-1</td>
<td>99%</td>
</tr>
<tr>
<td>NE</td>
<td>529</td>
<td>97</td>
<td>18%</td>
<td>755</td>
<td>180</td>
<td>24%</td>
<td>83</td>
<td>186%</td>
</tr>
<tr>
<td>SE</td>
<td>300</td>
<td>73</td>
<td>24%</td>
<td>452</td>
<td>123</td>
<td>28%</td>
<td>50</td>
<td>168%</td>
</tr>
<tr>
<td>Total</td>
<td>3,991</td>
<td>809</td>
<td>20%</td>
<td>5,028</td>
<td>1,289</td>
<td>26%</td>
<td>480</td>
<td>163%</td>
</tr>
</tbody>
</table>
## Team Internship Program Summer 2012 Preview

<table>
<thead>
<tr>
<th>Team Internship Program</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>3</td>
<td>18</td>
<td>35</td>
<td>50</td>
<td>61</td>
<td>72</td>
<td>93</td>
<td>149</td>
<td>236</td>
<td>293</td>
</tr>
<tr>
<td>Teams</td>
<td>1</td>
<td>5</td>
<td>9</td>
<td>18</td>
<td>20</td>
<td>29</td>
<td>37</td>
<td>53</td>
<td>76</td>
<td>93</td>
</tr>
<tr>
<td>Companies</td>
<td>1</td>
<td>5</td>
<td>8</td>
<td>14</td>
<td>15</td>
<td>14</td>
<td>16</td>
<td>30</td>
<td>36</td>
<td>51</td>
</tr>
<tr>
<td>New sponsors</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>8</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>18</td>
<td>21</td>
<td>19</td>
</tr>
<tr>
<td>Returning sponsors</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>6</td>
<td>11</td>
<td>11</td>
<td>10</td>
<td>15</td>
<td>15</td>
<td>32</td>
</tr>
<tr>
<td>International teams</td>
<td>1</td>
<td>2</td>
<td>8</td>
<td>0</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* in progress

---

UCSD Jacobs Corporate Affiliates Program

connecting you to talent and technology
TIP Sponsors – Summer 2012
Moxie Foundation Gift Enables Incubator to Mentor Undergraduate Inventors

- Product Design and Entrepreneurship Course
- Laboratory Space and Equipment to Develop Prototypes
- Mentoring by Experienced Inventors and Entrepreneurs
- Competitive Awards for Best Ideas

Irwin Zahn

Got Moxie?
(spirit, courage, initiative)
Englekirk Center Shake Test:
Protecting Critical Non-Structural Components in Buildings
Distinguished Faculty Presentation

Professor Tara Hutchinson
Structural Engineering

Earthquake and Post-Earthquake Fire Performance of Nonstructural Components and Systems in a Full-Scale Building
Anne O’Donnell
Director
Corporate Affiliates Program
Jacobs School of Engineering
Congratulations!

UNIVERSITY OF CALIFORNIA,
SAN DIEGO
ACADEMIC AFFAIRS

Exemplary Staff
Employee of the Year
Nominees

Cody Noghera
Deputy Director, Corporate Affiliates Program

Terrance Mayes
Director, IDEA Student Center
2012 Highlights

- 600 Participants
- New judging format was well received
- Thank You Sponsors

“Best access to research at the Jacobs School”
Master of Advanced Study Degree

Faye Kurpanek
Director
Executive Education
Jacobs School of Engineering
## Master of Advanced Study Degree

<table>
<thead>
<tr>
<th>Program</th>
<th>Fall 2011 Enrolled</th>
<th>Fall 2012 Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architecture-Based Enterprise Systems Engineering</td>
<td>30 new / 27 returning</td>
<td>35</td>
</tr>
<tr>
<td>Wireless Embedded Systems</td>
<td>20</td>
<td>80 (30 max enrollment)</td>
</tr>
<tr>
<td>Medical Devices Engineering</td>
<td>6</td>
<td>56 (15 max enrollment)</td>
</tr>
<tr>
<td>Simulation-Based Engineering</td>
<td>--</td>
<td>41</td>
</tr>
<tr>
<td>Structural Health Monitoring</td>
<td>--</td>
<td>32</td>
</tr>
</tbody>
</table>

---

*connecting you to talent and technology*
Terrance Mayes
Director
IDEA Student Center
Jacobs School of Engineering
IDEA Scholars Program Moving Forward

2011  22 Freshmen

2012  34 Freshmen, 20 Transfer Students

Summer PreP 2012: event for Transfer Students

IDEA Scholars Breakfast for Prospective Students

90% of participants applied to be IDEA Scholars
Retention Programs Underway

JUMP Peer Mentoring

IDEA Study Lab and Tutoring

Introduction to Engineering Courses

Smart Solar Power
IDEA Scholars Project
TIP Training Day on Saturday June 2, 2012

- Day-long training
- Workshops Tracts:
  - Communication Skills
  - Teams & Leadership
  - Professional Development
- New features:
  - Conference Style
  - Industry Speakers
  - Intern Guidebook
- 100+ students attended
TIP Training Day on Saturday June 2, 2012

Thank you to our industry speakers and collaborators!
TIP Training Day on Saturday June 2, 2012
Junkyard Derby 2012 Re-CAP

28 Teams: All Majors, Alumni, Faculty and Staff
Next Year Two Divisions: Including UPHILL Race!

Winning Car: Theta Tau

Thank you to CAP sponsors:

Yahoo! L3
1st Annual Facebook Hack March 2-3, 2012

- 130 Bright, Innovative Students
- 14 Multi-Disciplinary Teams
- Winners advance to next level of competition

“The fb team was very impressed by the quality of the students and their hacks as well as how smoothly everything ran.”

Adam Ward, Facebook University Recruiting Manager
Dinner with the Deans

CAP Executives value ‘getting involved’
Dates to Remember in 2012:

June 19  Regional Tech Talk and Alumni Event  - Cymer
August 14  Regional Tech Talk and Alumni Event  - Facebook
September 10  Spirit of Solar  CAP Executive Cruise on San Diego Bay
September 14  Structural and Materials Engineering Building Dedication
September 27  CAP Executive Board Meeting – IN OUR NEW EBU IV!
November 8  Professional Evening with Industry by NSBE, SHPE, SWE, & AISES
A CAP ‘Champion’ is one whose vested interest not only lies with their organization but also the genuine interest of the Students, Faculty, and Research at the Jacobs School.

This is a CAP member who participates in several CAP benefits and programs to create opportunities for talent and technology that develops and inspires the human and intellectual capital for the Jacobs School, for their company and for society.
Thank you CAP 2011 - 2012 Leadership

CAP Chairman:
Anton Monk, Ph.D. UCSD ‘94
Co-founder & VP Technology
Entropic Communications

CAP Vice Chairman:
Rusty Sailors
Chief Project Engineer, Director
BAE Systems
Welcome CAP Executive Board