CAP Chairman and Vice Chairman

Nik Devereaux
Director of Software Engineering
ViaSat

Fritz Hesse
Vice President of Engineering
Mitek Systems
Welcome New CAP Partners
What Is Formula SAE?

Formula Society of Automotive Engineers

- Largest engineering design competition in the world
- Design, fabrication and testing of an open-wheel prototype race car
  - Dynamic events (autocross, acceleration, skid-pad, endurance)
  - Static events (business presentation, cost report, design review, fuel efficiency)
Who Is Triton Racing?

Society of Automotive Engineers (Triton Racing)

- Places students in optimal position to gain hands-on knowledge and prepare for a professional setting
  - Engineering and design skills
  - Manufacture and machining skills
  - Leadership and management skills
  - Teamwork and networking skills
Triton Racing Timeline

- Set scope based on previous designs and feedback
- Solidworks, Hyperworks, Ansys, etc.
- Documentation / drawings

Design & Documentation (Mar. - Aug.) ➔ Manufacturing & Assembly (Sept. - Mar.) ➔ Testing & Tuning (Mar. - Jun.) ➔ Competition (Jun.)
Triton Racing Timeline

- Machining
  - CNC
  - Lathe
  - Mill
  - etc.
- Welding
- Composite Layup
- Assembly
Triton Racing Timeline

- Test the car and troubleshoot
- Fine-tune the car for maximum performance
- Driver training
Triton Racing Timeline

- Compete in Lincoln, Nebraska
- And WIN!
- 8th place out of 80+ other teams in 2017

<table>
<thead>
<tr>
<th>Static Events</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presentation</td>
<td>75</td>
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<tr>
<td>Engineering Design</td>
<td>150</td>
</tr>
<tr>
<td>Cost Analysis</td>
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<table>
<thead>
<tr>
<th>Dynamic Events</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceleration</td>
<td>100</td>
</tr>
<tr>
<td>Skid-Pad</td>
<td>75</td>
</tr>
<tr>
<td>Autocross</td>
<td>125</td>
</tr>
<tr>
<td>Efficiency</td>
<td>100</td>
</tr>
<tr>
<td>Endurance</td>
<td>275</td>
</tr>
</tbody>
</table>

Total Points 1,000
Evan’s Garage Event

Come Join Us at Evan's Garage

Triton Racing, UCSD's Formula SAE team, would like to invite you to a short party at Evan’s Garage - an automotive museum and storage facility.

- Evan's Garage will be hosting Triton Racing to celebrate their top 8 finish in Lincoln, NE.
- Located just off the I-5
  - 4953 Pacific Highway
  - San Diego, CA 92110
- The party will be brisk, starting at 1 PM and ending at 3 PM.

Please RSVP by clicking the button to the right and filling out the google form or simply respond to this email.

February 2018
02

Sign up today
RSVP
April Car (TR-19) Reveal

ucsdtritonracing@gmail.com
Thank you!

ucsdtritonracing@gmail.com
Jacobs School Strategic Vision

- Conduct leading edge research that defines the Digital Future and helps solve Grand Challenges in health care, sustainability, and safety for the benefit of society

- Educate engineering leaders of the future through a combination of deep theory, hands-on project courses, research, and training in teamwork ethics and leadership.

- Ensure exponential impact through partnerships across campus and with industry.
Research Vision of the Digital Future
Harnessing Exponential Data for Actionable Decisions

- Precision healthcare
- Distributed renewable energy
- Smart materials
- Autonomy

- Machine-integrated security
- Cryptography
- Privacy
- Authentication

- Sensors
- Hardware
- Machine Vision
- 5G Networks

- Data Science
- Machine Learning
- Computing at Edge of Cloud
- Bioinformatics
Something BIG is happening here...
New Building Name: Franklin Antonio Hall

- 13 collaborative research Collaboratories
- Seeking industry partners

Alumnus and Qualcomm Co-Founder Franklin Antonio Gives $30 Million to UC San Diego Jacobs School of Engineering

- Sustainable Energy and New Materials
- Precision Health and Wellness
- Secure Networks and Systems
- Sentient Analytic Systems
- Education and Entrepreneurism
National Academy of Engineering Election

Mark Dankberg
Chairman and CEO, Viasat
For contributions to broadband internet communications via satellite

February 2, 2018, 3:30pm
Inaugural Zable Endowed Chair in Energy Technologies

Shirley Meng
Zable Endowed Chair in Energy Technologies
Director, Sustainable Power & Energy Center
Professor, Nanoengineering

January 30, 2018, 5:00pm
Jacobs School spinouts – recent success

Hush acquired by Bose

Tortuga Logic raises $2M in seed funding
$178.9M

Discovery & Innovation Engine

- Federal Research, $106.9M
- Industry & Private Research, $43.9M
- State Research, $18.2M
- Scholarships & Fellowships, $9.9M
Improving Student Experiences

- Largest enrollment of graduate students ever – 2,792 students
- Continuing to improve student-to-professor ratio in classrooms
- Experiential engineering continues to expand, covering freshman and sophomore curriculum
Brainstorm Cooperative Education Programs

1. What are the perceived benefits or gains achieved by co-op programs vs. traditional summer internship?

2. What are the negative implications?

3. Are UC San Diego students at a disadvantage today because we do not offer a formal co-op program? If so, how?

4. Given UC San Diego quarter system schedule (below), what would be the ideal timeframe for a co-op program?

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UC San Diego 2018-2019 Calendar

Fall Quarter: September 24 – December 15
Winter Quarter: January 7 – March 23
Spring Quarter: April 1 – June 14

UC San Diego
JACOBS SCHOOL OF ENGINEERING
Corporate Affiliates Program
Connected Health: Enabling Predictive and Personalized Health Care
Connected Health: Enabling Predictive and Personalized Health Care

February 1, 2017

Sujit Dey | Professor, ECE Department | sdey@ucsd.edu
Director, Center for Wireless Communications, UC San Diego
Director, Institute for the Global Entrepreneur, UC San Diego
CAP BUSINESS

Wil Dyer
Director, Corporate Affiliates Program, Jacobs School of Engineering

CAP Business Update
Jacobs School Corporate Affiliates Program

1. Strategically Sourced and Talented Engineers
   8,700+ students, largest school in California

2. Innovation Driven by Industry Collaboration
   $178M+ in Annual Research Fueling Discoveries
   247+ Engineering Faculty and Growing
   10 New Agile Research Centers

3. Future of Engineering Research & Education
   A Seat on the Dean’s Corporate Executive Board
   Top 15 Engineering School, Fastest Growing
Who’s hiring? Bring opportunities front and center to our talented students through CAP

- Host targeted recruitment events at the Jacobs School
- Source of student employment interests and profiles
- Engage in hands-on workshops, and design courses
- Access to invite-only research reviews, summits, and forums in deep interests areas.
Time to Submit Projects for TIP Summer 2018

**December 15th:** Budget, Identify & Define Project Scope

**February 15th:** Submit Completed Project Description for Posting

**April 20th:** Review Pre-screened Resumes and Select Interview candidates

**April 20th-April 30th:** Interview Students

**May 1st:** Extend Offers
Save The Date!

Team Internship Program 15 Year Reunion: June 2, 2018
1. CAP Partner Sponsor Opportunities

Come to Research Expo 2018 and experience leading-edge engineering and computer science research. Talk technology with graduate students. Network with faculty, students, alumni and industry professionals.

2. CAP Executive Distinguished Industry Judge Opportunities

200+ GRADUATE STUDENT POSTERS
2:00 – 4:30PM
Meet graduate students who match your company’s technology roadmaps and workforce needs.

LIGHTNING TECH TALKS
2:30 – 3:30PM
Twenty-minute faculty talks. Get industry-relevant research highlights from world-renowned Jacobs School faculty.

NETWORKING RECEPTION
4:30 – 6:00PM
Connect with engineering faculty, students and alumni. Meet a broad spectrum of industry professionals. Best poster awards.

3. Engage Alumni and Employees in Innovation and Technology

Research Expo Sponsorships
Contact Tammy Traudt: ttraudt@ucsd.edu

REGISTER
JacobsSchool.ucsd.edu/re
Admission: $100

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UCSanDiego
JACOBS SCHOOL OF ENGINEERING
Corporate Affiliates Program
CAP Executive Feedback: BIG Idea follow-up

• Discussion topic 1: Cooperative Education Programs

• Discussion topic 2: Future of post-baccalaureate education

• Discussion topic 3: Creating a systems engineering program for the next decade

Upcoming CAP Executive discussions with Dean Pisano:
March 19, 3:30pm
March 21, 10:00am
March 22, 10:30am
## Upcoming Events

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<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>March 7, 2018</td>
<td>Center for Microbiome Innovation (CMI) Research Summit</td>
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<tr>
<td>March 11-13, 2018</td>
<td>Non-Volatile Memories Workshop (NVMW)</td>
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<tr>
<td>March 19, 2018</td>
<td>Dean’s CAP Executive Feedback Discussion Session #1</td>
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<tr>
<td>March 21, 2018</td>
<td>Dean’s CAP Executive Feedback Discussion Session #2</td>
</tr>
<tr>
<td>March 22, 2018</td>
<td>Dean’s CAP Executive Feedback Discussion Session #3</td>
</tr>
<tr>
<td>April 19, 2018</td>
<td>Jacobs School of Engineering Research Expo</td>
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<tr>
<td>May 1, 2018</td>
<td>Center for Extreme Events Research (CEER) Research Summit</td>
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<tr>
<td>June 2, 2018</td>
<td>TIP 15 Year Reunion</td>
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<tr>
<td>June 7, 2018</td>
<td>June CAP Executive Board Meeting</td>
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Thank you!

Next CAP Executive Board Meeting: June 7, 2018