



UC San Diego

**JACOBS SCHOOL OF ENGINEERING**  
Corporate Affiliates Program

Welcome  
CAP Executive Board  
Thursday, February 1, 2018

# CAP Chairman and Vice Chairman



**Nik Devereaux**

Director of Software Engineering  
ViaSat



**Fritz Hesse**

Vice President of Engineering  
Mitek Systems

# Welcome New CAP Partners

**BAE SYSTEMS**

I N S P I R E D   W O R K



**MUM**  
INDUSTRIES



**STRONG BOX**



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# TRITON RACING

UNIVERSITY OF CALIFORNIA, SAN DIEGO



# What Is Formula SAE?

# 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

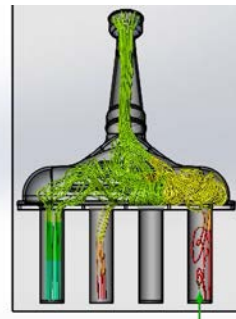
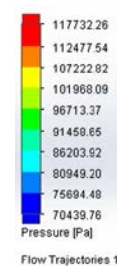
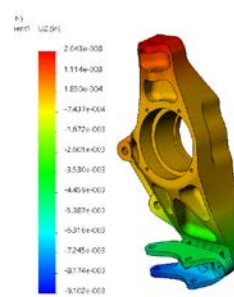
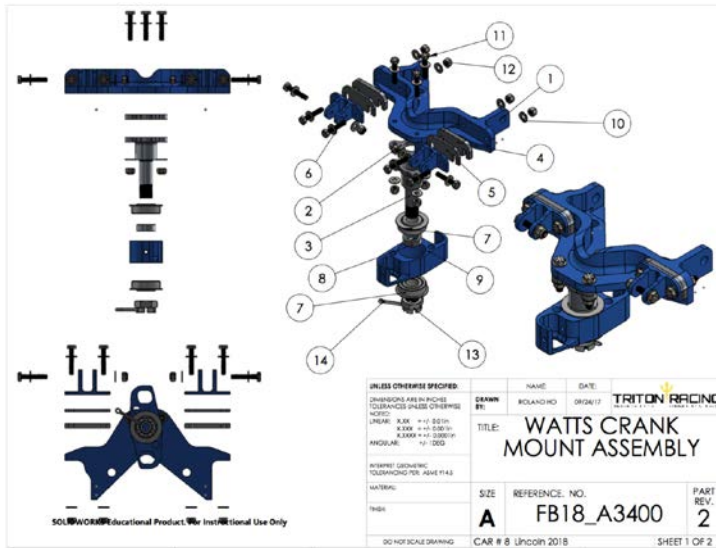
Design &  
Documentation  
(Mar. - Aug.)

Manufacturing  
& Assembly  
(Sept. - Mar.)

Testing & Tuning  
(Mar. - Jun.)

Competition  
(Jun.)

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



# Triton Racing Timeline

Design &  
Documentation  
(Mar. - Aug.)



**Manufacturing  
& Assembly  
(Sept. - Mar.)**



Testing & Tuning  
(Mar. - Jun.)



Competition  
(Jun.)

- Machining
  - CNC
  - Lathe
  - Mill
  - etc.
- Welding
- Composite Layup
- Assembly





# Triton Racing Timeline

Design &  
Documentation  
(Mar. - Aug.)



Manufacturing  
& Assembly  
(Sept. - Mar.)



**Testing & Tuning  
(Mar. - Jun.)**



Competition  
(Jun.)

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



# Triton Racing Timeline

Design &  
Documentation  
(Mar. - Aug.)



Manufacturing  
& Assembly  
(Sept. - Mar.)



Testing & Tuning  
(Mar. - Jun.)



**Competition  
(Jun.)**

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

## Static Events:

Presentation	75
Engineering Design	150
Cost Analysis	100

## Dynamic Events

Acceleration	100
Skid-Pad	75
Autocross	125
Efficiency	100
Endurance	275

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](mailto:ucsdtritonracing@gmail.com)

# Thank you!



[ucsdtritonracing@gmail.com](mailto:ucsdtritonracing@gmail.com)



# Dean's Brief



# Albert P. Pisano

Dean, Jacobs School of Engineering



# 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





# Something BIG is happening here...



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# New Building Name: Franklin Antonio Hall



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

- 13 collaborative research Collaboratories
- Seeking industry partners

Sustainable  
Energy and  
New Materials

Precision  
Health and  
Wellness

Secure  
Networks and  
Systems

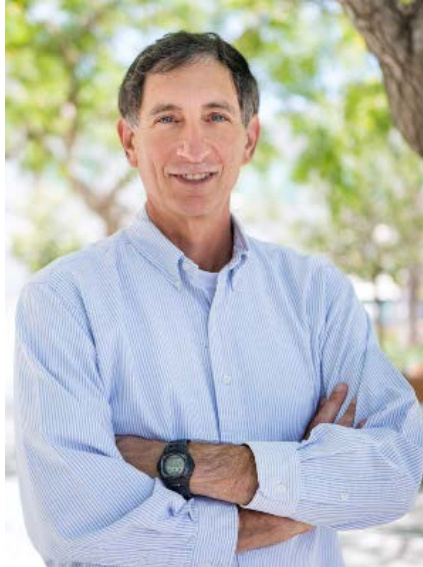
Sentient  
Analytic  
Systems

Education and  
Entrepreneurism

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# National Academy of Engineering Election



**Mark Dankberg**

Chairman and CEO, Viasat

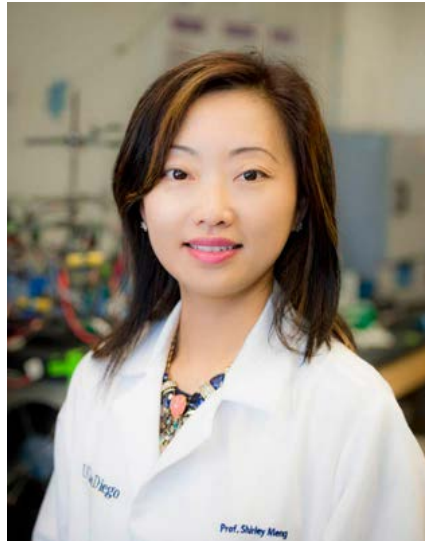
*For contributions to broadband internet communications via satellite*

February 2, 2018, 3:30pm

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# 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

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# Jacobs School spinouts – recent success

Hush acquired by Bose



Tortuga Logic raises \$2M in seed funding



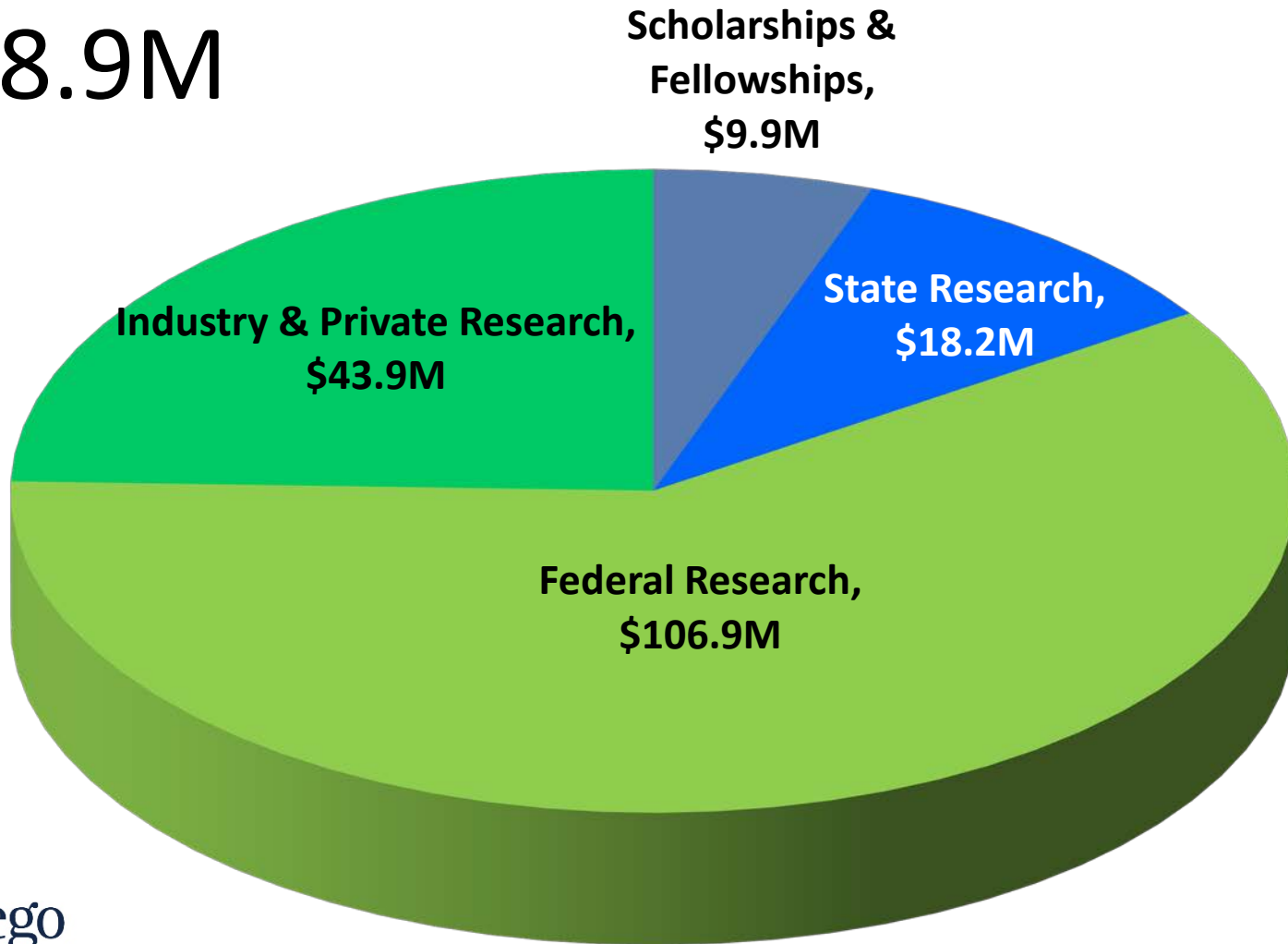
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# Discovery & Innovation Engine

**\$178.9M**



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# 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?

## UC San Diego 2018-2019 Calendar

Fall Quarter: September 24 – December 15

Winter Quarter: January 7 – March 23

Spring Quarter: April 1 – June 14

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# FACULTY PRESENTATION



## Sujit Dey

Director, Center for Wireless Communications

Professor, Electrical & Computer Engineering

**Connected Health: Enabling Predictive and Personalized Health Care**

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UC San Diego

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Center for Wireless Communications

# Connected Health: Enabling Predictive and Personalized Health Care

February 1, 2017

**Sujit Dey** | Professor, ECE Department | [sdey@ucsd.edu](mailto: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

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# Jacobs School Corporate Affiliates Program 2018





# Jacobs School Corporate Affiliates Program



## **Strategically Sourced and Talented Engineers**

**8,700+** students, largest school in California



## **Innovation Driven by Industry Collaboration**

**\$178M+** in Annual Research Fueling Discoveries

**247+** Engineering Faculty and Growing

**10** New Agile Research Centers



## **Future of Engineering Research & Education**

A Seat on the Dean's Corporate Executive Board

**Top 15** Engineering School, Fastest Growing

**UC San Diego**

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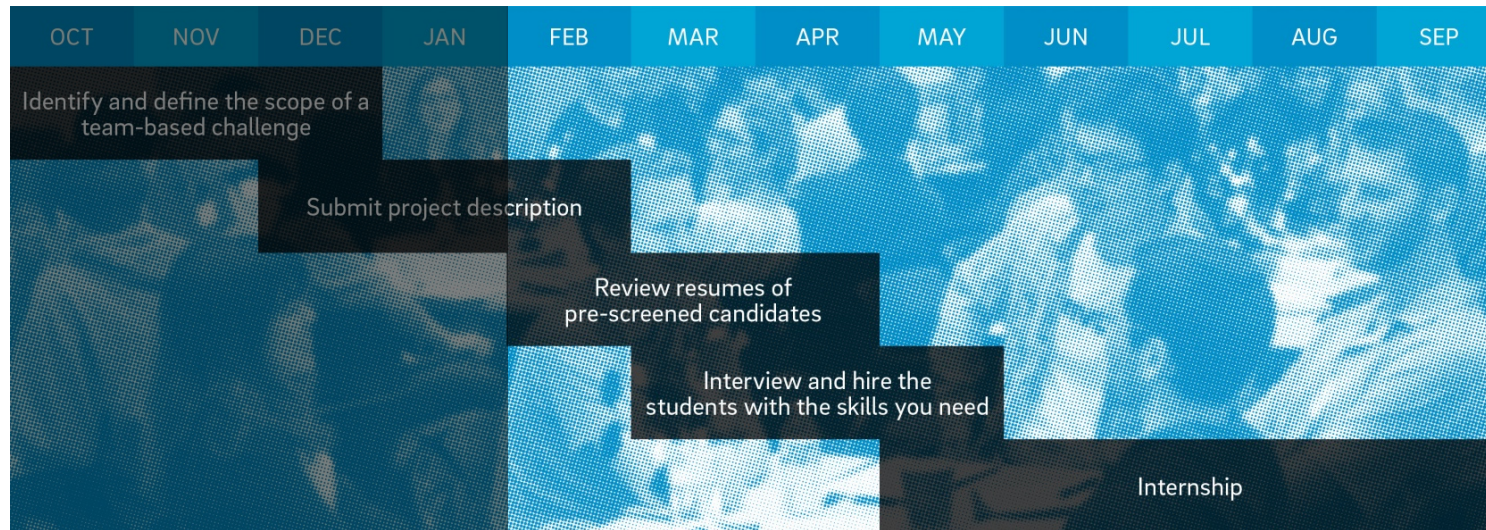
# Who's hiring? Bring opportunities front and center to our talented students through CAP

- 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.





# TIP Summer 2018



## ***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

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# Save The Date!

Team Internship Program 15 Year Reunion: June 2, 2018





# Research Expo 2018

April 19, 2018

1. CAP Partner Sponsor Opportunities

2. CAP Executive Distinguished Industry Judge Opportunities

3. Engage Alumni and Employees in Innovation and Technology

RESEARCH EXPO 2018  
THURSDAY, APRIL 19 – 1:30–6:00PM – UC SAN DIEGO

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.

## 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.

Research Expo Sponsorships  
Contact Tammy Traudt: [ttraudt@ucsd.edu](mailto:ttraudt@ucsd.edu)



REGISTER

[JacobsSchool.ucsd.edu/re](https://JacobsSchool.ucsd.edu/re)  
Admission: \$100

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Lawrence Livermore  
National Laboratory

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# 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

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We're looking for a **BIG** idea...  
One that will dramatically transform industry collaboration. What's yours?

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## Upcoming CAP Executive discussions with Dean Pisano:

March 19, 3:30pm

March 21, 10:00am

March 22, 10:30am

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# Upcoming Events

March 7, 2018  
March 11-13, 2018

Center for Microbiome Innovation (CMI) Research Summit  
Non-Volatile Memories Workshop (NVMW)

**March 19, 2018**  
**March 21, 2018**  
**March 22, 2018**

**Dean's CAP Executive Feedback Discussion Session #1**  
**Dean's CAP Executive Feedback Discussion Session #2**  
**Dean's CAP Executive Feedback Discussion Session #3**

April 19, 2018  
May 1, 2018  
June 2, 2018  
June 7, 2018

Jacobs School of Engineering Research Expo  
Center for Extreme Events Research (CEER) Research Summit  
TIP 15 Year Reunion  
June CAP Executive Board Meeting





UC San Diego  
Jacobs School of Engineering

Thank you!  
Next CAP Executive Board Meeting:  
June 7, 2018