

# IEEE FOOTHILL SECTION

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## Monthly Newsletter

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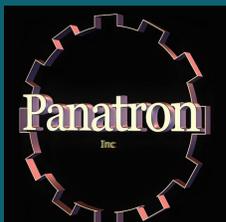
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## FEBRUARY EXCOM/OPCOM MEETING

By: Max Cherubin

The February ExCom/OpCom was held via Bluejeans. We reviewed the previous month's minutes and we had as well an update about Covid-19 by David Gonzalez. The PES chapter chair elections update revote underway will end on March 7th, 2021, and ExCom/OpCom Meeting was attended by 31 attendees.

### Section and Committees

Membership Development as reported by Kim Mosley. Kim noted that there had been one Senior Elevation reported but she found out later that it was actually someone moving into the Section. On Education Activities, David had met with an OC Section member who has a company in the Educational area. David as well shared that the Eastvale Rotary Club is interested in sponsoring a Science Exposition k-12 hoping to get IEEE and ASCE support.

We invited as well a webmaster Tyler Hadley and had comments about our website. Tyler owns a digital marketing firm ([www.engagementowl.com](http://www.engagementowl.com)). Tyler reviewed the website and found some unsecured links esp in the student chapter, the format of the website itself is not following the IEEE recommendations. After some discussions, the Chair proposed an ad-hoc committee to work on the errors in the website.

## STUDENT SECTION UPDATES

CALIFORNIA STATE POLYTECHNIC UNIVERSITY, POMONA (CPP) REPORTED THE ANNUAL IEEE REPORT IN PROGRESS, GROUP MEETINGS, AND DR. YU ON STEM CHALLENGE PROJECT. POWER AND ENERGY SOCIETY (PES) CHAIR REVOTE IS ONGOING. DR. NANPENG YU REPORTED SOME ISSUES WITH GRADUATE STUDENT MEMBERS AND VOTING.

# JANUARY EXCOM/OPCOM MEETING

EXCOM/OPCOM MEETING LAST JANUARY 12, 2021, WAS HELD VIRTUALLY VIA ZOOM AND HAD 15 ATTENDEES IN TOTAL. IT WAS DISCUSSED THEN THAT THE ELECTION SCOPE FOR OUS IS NOW LIMITED TO MEMBERS OF THAT SPECIFIC GROUP. NEWLY ELECTED OFFICERS FOR SECTION ELECTIONS HAVE BEEN VOTED AND A SECRETARY'S REPORT HAS BEEN APPROVED.

## SECTION AND COMMITTEES

ON EDUCATIONAL ACTIVITIES, THE EFFORT FOR STEM INITIATIVE IS PUT ON HOLD DUE TO THE PENDING WORD BACK FROM RIALTO SCHOOL DISTRICT IN REGARDS TO THE PLANNED FOR APRIL (TEACHERS) AND MAY (STUDENTS) BOOT CAMP.

## STUDENT SECTION UPDATES

CALIFORNIA BAPTIST UNIVERSITY (CBU) EXTENDED ITS WINTER BREAK TO JAN 25 BECAUSE OF THE PANDEMIC. WHILE THE CALIFORNIA POLYTECHNIC UNIVERSITY, POMONA (CPP) HAD A SEMINAR FROM QUALCOM REPRESENTATIVE. MEANWHILE, THERE WERE NO UPDATES FROM CALIFORNIA STATE UNIVERSITY, SAN BERNARDINO, AND THE UNIVERSITY OF CALIFORNIA, RIVERSIDE (UCR).

## TECHNICAL SOCIETY AND COMMITTEES

POWER & ENERGY SOCIETY (PES) ATTENDED A VIRTUAL PES CONFERENCE ABOUT USING VTOOLS. THEY WERE ASKING FOR INFORMATION ABOUT PES ELECTION SITUATION BECAUSE SEAN MONEMI'S BIO WAS MISSING AND IT WILL BE HANDLED LATER THOUGH PROBABLY AT THE EXCOM MEETING. SUSTECH POSTER COMPETITION IS IN THE WORKS AND DETAILS ARE STILL BEING WORKED OUT. THE SUBMISSION OF THE DEADLINE WILL ON FEB. 15, 2021.

NANOTECHNOLOGY COUNCIL FH SECTION CHAPTER, DR. JENNY YU IS PLANNING A STUDENT DESIGN COMPETITION AND SHE'S REQUESTING A FUND FOR IT

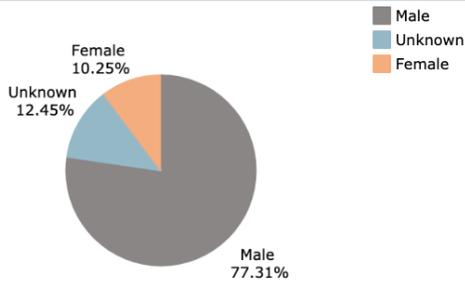
# MEMBERSHIP DEVELOPMENT

**BY KIMBERLY MOSLEY**

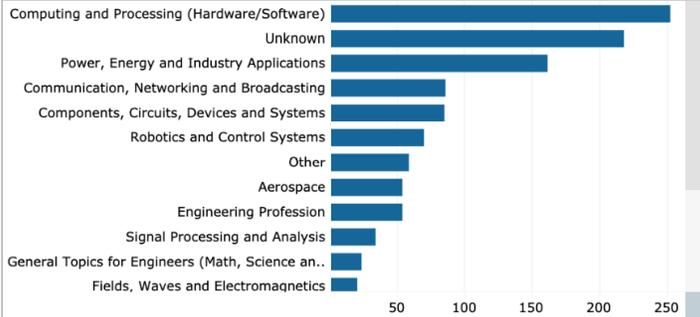
WE CURRENTLY HAVE 1066 MEMBERS WITHIN THE GEOGRAPHIC AREA.

Count by Region and Grade					
Region	Council	Section	Grade Category	Grade	Total
Total					3
Total					13
Southern California Council	Foothill Section	IEEE Grades	Associate Member		19
			Fellow		13
			Graduate Student Member		102
			Life Fellow		13
			Life Member		136
			Life Senior		40
			Member		457
			Senior Member		82
			Student Member		185
			Other Grades	Affiliate	
Total					1,066

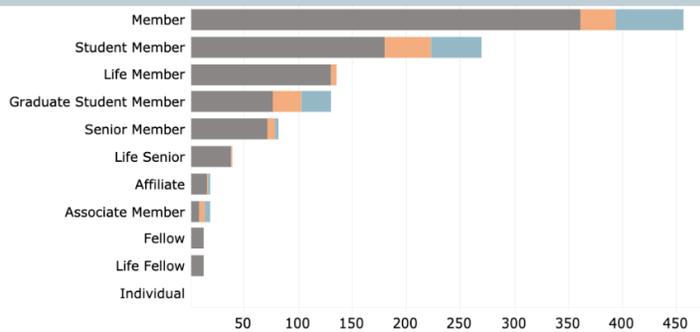
Count by Gender



Count by Technology Focus Area



Count by Grade and Gender



## IEEE SUSTECH-TALKS #3: GIS – MAPPING THE WAY TO A SUSTAINABLE WORLD – A DIGITAL TRANSFORMATION

SPEAKER: BILL MEEHAN OF ESRI

BILL MEEHAN, P.E. IS THE AUTHOR OF FOUR BOOKS: GIS FOR ENHANCED ELECTRIC UTILITY PERFORMANCE, MODELING ELECTRIC DISTRIBUTION WITH GIS, EMPOWERING ELECTRIC AND GAS UTILITIES WITH GIS, AND POWER SYSTEM ANALYSIS BY DIGITAL COMPUTER. HIS BLOGS HAVE BEEN WIDELY READ. HE HAS LECTURED EXTENSIVELY AND TAUGHT COURSES AT NORTHEASTERN UNIVERSITY AND THE UNIVERSITY OF MASSACHUSETTS.

BILL HOLDS A B.S. IN ELECTRICAL ENGINEERING FROM NORTHEASTERN UNIVERSITY AND AN M.S. IN ELECTRIC POWER ENGINEERING FROM RENSSELAER POLYTECHNIC INSTITUTE.

PRIOR TO JOINING ESRI, BILL WAS THE VICE PRESIDENT OF ELECTRIC OPERATIONS FOR A MAJOR ELECTRIC AND GAS UTILITY. BILL IS A REGISTERED ENGINEER IN THE COMMONWEALTH OF MASSACHUSETTS. HE CURRENTLY CO-LEADS THE GLOBAL ELECTRIC UTILITY SOLUTIONS MARKETING PRACTICE AT ESRI, THE WORLD’S LARGEST GIS COMPANY.

ABSTRACT: WHEN WE FIRST HEAR THE TERM GIS, WE OFTEN THINK OF MAPS. CERTAINLY, MAPS ARE THE FOUNDATION OF GIS. HOWEVER, IT IS FAR MORE. RATHER THE FIRST WORD THAT COMES TO MIND MIGHT WELL BE DISCOVERY - DISCOVER WHAT WE HAVE DONE (FOR GOOD OR BAD). IT REVEALS THE PATTERNS OF OUR ACTIONS. MOST IMPORTANTLY IT PROVIDES A ROADMAP TO A BETTER WORLD.

THIS PRESENTATION EXAMINES DIGITAL TRANSFORMATION AND THE ROLE OF GIS. AS WE ATTEMPT TO ATTACK THE SERIOUS PROBLEMS OF OUR TIMES - AGING INFRASTRUCTURE, CLIMATE CHANGE, POVERTY, POLLUTION, INEQUITY, WE NEED TO THINK DIFFERENTLY. WE MUST MOVE FROM AN INCREMENTAL APPROACH TO ONE OF INNOVATION. GIS OR LOCATION TECHNOLOGY PROVIDES A COMMON FRAMEWORK FOR LOOKING AT EVERY ASPECT OF OUR WORLD - SINCE NEARLY EVERYTHING EXISTS SOMEWHERE. GIS IS ABOUT CAPTURING INFORMATION, UNDERSTANDING IT THEN SHARING IT BROADLY. THINKING DIFFERENTLY ABOUT GIS WILL HELP US MAP THE WAY TO A MORE SUSTAINABLE WORLD.

## IEEE STUDENT ENGINEERING TEAM CHALLENGE 2021

THE IEEE STUDENT ENGINEERING TEAM CHALLENGE (IEEE SETC) IS FOCUSED ON STUDENTS FROM SOCIO-ECONOMIC DISADVANTAGED COMMUNITIES WITH THE GOAL TO STIMULATE INTEREST IN THE STEM FIELDS.

THIS CHALLENGE IS ACTIVELY LOOKING TO INCLUDE MINORITY CHILDREN OF COLOR. THESE STUDENTS ARE INVITED TO PARTICIPATE, ALONG WITH A FEW OF THEIR PEERS, IN THIS POSTER COMPETITION BY DISPLAYING AN ORIGINAL PROJECT PROPOSAL FOCUSED ON A FEW TARGETED TOPICS.

STUDENTS IN HIGH SCHOOL AND COLLEGE CONSIDERING COLLEGE MAJORS IN SCIENCE AND ENGINEERING DISCIPLINES ARE ENCOURAGED TO TRY THEIR HAND AT MEETING THIS TEAM CHALLENGE BY DESIGNING AND DISPLAYING A SOLUTION FOR OR AN INVESTIGATION INTO A PROBLEM AREA ASSOCIATED WITH ONE OF THE TOPICAL BOUNDARIES OF THIS YEAR'S CHALLENGE.

FOR SOME OF THE TOPICAL AREAS STARTUP, TRAINING AND MATERIALS MAY BE AVAILABLE. FOR PROJECTS THAT RISE TO THE TOP OF THE CHALLENGE, MORE EQUIPMENT AND SUPPORT MAY BE MADE AVAILABLE TO FOSTER THE COMPLETION OF THE PROPOSAL. IEEE STUDENT MEMBERS MAY BE AVAILABLE TO TRAIN AND ASSIST AS WELL.

TEAM PROJECTS THAT ARE INCLUSIVE AND COLLABORATIVE SHOWCASING CREATIVITY AND INGENUITY WILL BE SHARED WITH AN AUDIENCE OF ACADEMIC AND INDUSTRIAL TECHNICAL EXPERTS WHO WILL PROVIDE RECOGNITION AND AWARD PRIZES IN SEVERAL PARTICIPANT CATEGORIES. ALSO, YOUR POSTER MAY BE PUBLISHED IN AN IEEE SOCIETY PUBLICATION AND YOU CAN NOTE YOUR PARTICIPATION ON YOUR RESUMES AND COLLEGE APPLICATIONS.

**PRIZES IN EACH PARTICIPANT CATEGORY:**  
\$400 FIRST PRIZE, \$250 SECOND PRIZE,  
\$100 THIRD PRIZE.

**TOPICS INCLUDED IN THE 2021 CHALLENGE:**

SUSTAINABILITY TECHNOLOGY;  
RENEWABLE/ALTERNATIVE ENERGY;  
SMART GRID; WATER RESOURCES;  
OCEAN/AIR WASTE & POLLUTION;  
SOCIETAL IMPLICATIONS & QUALITY OF LIFE.

ROBOTICS TECHNOLOGY: UNMANNED AERIAL VEHICLES; SOFT ROBOTICS; OTHER TYPES OF ROBOTICS.

SCIENCES AND HEALTH TECHNOLOGY: PHYSICS; BIOLOGY; CHEMISTRY; HEALTH.

MULTIDISCIPLINARY TECHNOLOGY:  
COMBINATIONS OF SCIENCES AND ENGINEERING DISCIPLINES.

TOPICS WITH STARTUP AND FOLLOW-UP MATERIALS: RASPBERRY PI; AIR QUALITY SENSOR; ROBOTIC SERVOS; THERMOELECTRIC DEVICES; ARDUINO-RELATED KIT; ARDUINO AND MORE.

**HOW TO PARTICIPATE AND IMPORTANT DEADLINES:**

FORM A TEAM OF TWO TO FOUR PARTICIPANTS. THERE IS NO SUBMISSION FEE. SUBMIT BY 5/31/2021 AND YOU WILL BE NOTIFIED OF THE ACCEPTANCE OF YOUR SUBMISSION BY 6/30/2021.

FINAL PROJECT DEMONSTRATION AND POSTER PRESENTATION WILL BE ON LINE ON 8/31/2021. EACH PROJECT WILL BE JUDGED BASED ON THE INCLUSIVE AND COLLABORATIVE THE TEAM IS AND ITS OVERALL COMPLEXITY, ORIGINALITY, AND COMPLETION OF THE WORK WITH EXTRA CREATIVITY GIVING YOUR PROJECT AN ADVANTAGE.

**UPCOMING EVENTS:**

**MARCH 8- IEEE STUDENT ENGINEERING TEAM CHALLENGE 2021 ORGANIZATION COMMITTEE MEETING**

**MARCH 9- EXCOM/UPCOM ANNUAL MEETING**

**MARCH 15- IEEE E-LYNX GUIDE TO ENGINEERING**

**MARCH 29- IEEE STUDENT ENGINEERING TEAM CHALLENGE 2021 ORGANIZATION COMMITTEE AGENDA**

**SOCIAL MEDIA LINKS:**

**FACEBOOK:**

**[HTTPS://WWW.FACEBOOK.COM/IEEEFOOTHILL](https://www.facebook.com/IEEEFOOTHILL)**

**LINKEDIN:**

**[HTTPS://WWW.LINKEDIN.COM/GROUPS/13516173](https://www.linkedin.com/groups/13516173)**