## **AESS Professional Networking** & Mentoring Program

**AESS Board of Governors Meeting** 

**April 26-27, 2018** 

**Boston, MA, USA** 

Fabiola Colone

Networking & Mentoring

Chair, AESS





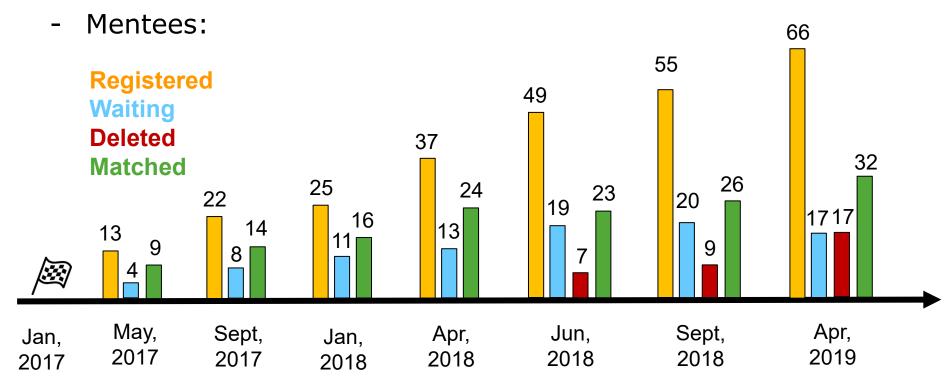
## **Strategic Objectives**

- The overall objective of the AESS Mentoring Program is to create active engagement and collaboration between experienced members and our younger AESS members.
- The program was launched on January 1, 2017 with around 80 mentors. Our focused strategy moving forward is to continue to add quality mentors, but focus mainly on showing value to and signing up mentees.
- These objectives not only provide value to our existing members, but may be relevant to the following goals of Member Services:
  - Grow AESS membership by 1% per year.
  - Recruit student members to full membership upon graduation.
  - Offer assistance to members for elevating to the next grade.



## **Mentoring Program statistics**

92 Mentors (+4 in 'waiting' status since last BoG meeting)

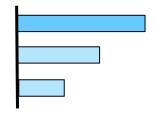


+11 new registrations since the last BoG meeting +29 since January 2018

The Program continues to grow!

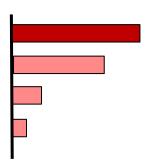


## **Mentoring Program statistics**



#### 17 Waiting

- **11** Waiting for info after welcome email
- 6 Need to be paired with Mentor (waiting for mentor reply or preferred mentors declined)



#### 17 Deleted

- 11 No response after 3 follow-up (3 non AESS members)
- 4 No more interested
- 2 None of the selected mentors accepted

### Average times:

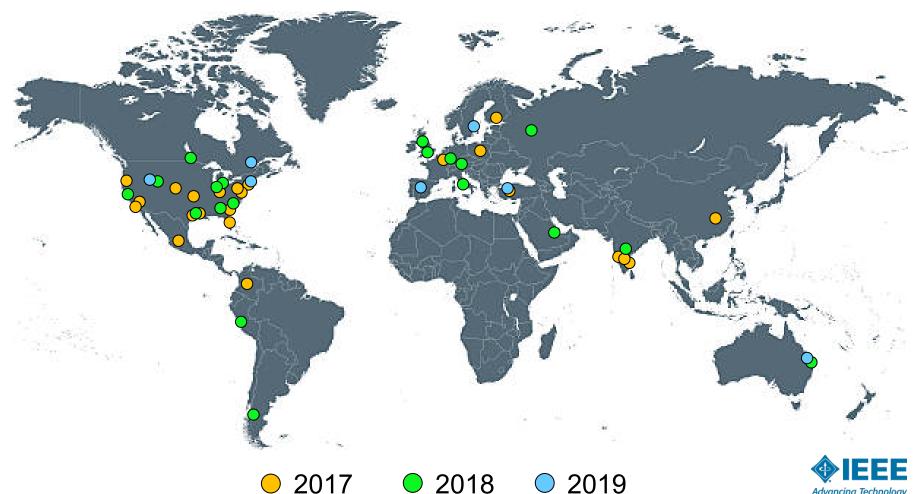
- registration+info received
- mentor identification + matching

- > 40 days
- > 20 days



## **Mentoring Program statistics**

Geographic distribution of mentees



## Weaknesses of the Program

- <u>Timeliness</u>: The process from the initial registration to the mentor/mentee match could be slow thus possibly causing a drop in enthusiasm.
- Friendliness: Some of the strategies we adopt to reach out to potential mentees are «impersonal». However, initiatives considering a personal engagement have been the most effective.
- Effectiveness: We do not monitor mentor/mentee pairs. However some of them are likely to become inactive after a while.
- Publicity: Initiatives giving prominence to the success of the program are occasional.



## Mentoring Program – Objective #1 Program administration

- Administer the program in a structured and organized manner:
  - weekly monitoring of new online registrations, establishing appropriate communication
  - close contact with participants and perspective participants by offering assistance at different stages
  - check mentors profiles and try to complete with a list of keywords and topics of interest
- Initial stages of the process could be made easier by exploiting electronic forms. Perhaps someone on the Mentoring Program Committee could support Judy on a continuous basis.

## Mentoring Program – Objective #2 Reinforce recruitment strategies

- Increase in number and extent the initiatives implementing recruiting strategies that consider a personal engagement:
  - Targeted recruitment at major AESS conferences (booths and dedicated events)
  - Advertising in AESS Publications, including testimonials
  - Engagement of AESS BoG / Mentors / Chapters / Panels/ MP Committee
  - Exploiting synergic interactions with other activities running in AESS, especially Education initiatives (DLs)
- Also additional Mentors are needed



Advertising in every issue of the AESS Magazine and the QEB

AESS Flyers sent to targeted Conferences

AESS Booth at 2019 IEEE Radar Conference





The AESS strives to foster the professional growth of its members. Engagement and collaboration within our community is a catalyst for effective integration and professional development of AESS members. The Society recognizes that this important process should not be left to chance. For this reason, we have pioneered a custom Professional Networking and Mentoring Program to connect younger and more experienced AESS members. Our vision is a flexible international program that is carefully implemented, attentively supported and singularly focused on providing benefits to AESS members.

#### Sign Up!

Whether you want to engage in professional networking or mentoring, either as a mentor or a mentee, please visit the AESS website and fill out the online application form.

Based on the Information you provide, we will create a Mentor Profile for you. As a leader in your field, mentoring is a powerful way to give back to the community

- Share knowledge and skills
- Foster community integration
   Shape the future of AESS

After you review the Mentor Profiles in the sign-up process, you will be able to choose up to three mentor preferences. Don't miss this

 Grow professional competence · Expand peer networks Achieve career goals

The Networking and Mentoring Program Committee will review all submitted Information. After signing up, you will be contacted by the AESS Program Coordinator to get you started. Sign up today! http://leee-aess.org/aess-professional-networking-and-mentoring-program







YP Event @ IEEE Radar Conference 2019

- Targeted audience (about 260 registered participants)
- Kameron and Francesca as guest speakers to address the audience in a more effective way.
- Francesca offered a Mentee perspective.



- About 120 participants
- Many students or young professionals in attendance



https://sites.google.com/uniroma1.it/rrsw2019

GTTI Radar and Remote Sensing Workshop 2019

Rome, 30-31 May 2019

of 11 made and hemote benoing workshop 2019

#### Draft program

#### Thursday, May 30th

13:00 - 14:00 Registration

14:00 - 14:10 Welcome (Pierfrancesco Lombardo)

14:10 - 14:30 Opening Speech: "Introduction to Cognitive Radar with applications and examples", (Alfonso Farina, Chair of AES Chapter – IEEE Italy Section)

14:30 - 15:50 Oral Session 1: Radar target detection and estimation (Chair: Antonio De Maio)

15:50 - 16:10 Coffee break

16:10 - 16:50 Keynote Speech: "Aerospace R&D Governance" (*Cristina Leone, Leonardo -Head of R&D Funded Projects & President of National Aerospace Technological Cluster*)

16:50 - 18:10 Oral Session 2: Earth Observation from the Space (Chair: Sebastiano Serpico)

18:10 - 18:40 Discussion (All)

20:00 - 22:00 Workshop dinner

#### Friday, May 31st

09:00 - 10:20 Oral Session 3: Passive Radar sensors (Chair: Marco Lops)

10:20 - 11:00 Keynote Speech: "The Copernicus paradigm as motivation for the development of knowledge", (Bernardo De Bernardinis, coordinator of the Copernicus Academy for the Italian Delegation and User Forum)

11:00 - 11:20 Coffee break & Poster Session

11:20 - 11:40 Update on the National Research Program (PNR) – Space (Vito Pascazio)

11:40 - 13:00 Oral Session 4: Remote Sensing radar
(Chair: Giovanni Corsini)

#### 13:00 - 14:00 Lunch & Poster Session

14:00 - 15:00 Update from the IEEE societies
(Paolo Gamba, President of IEEE GRSS
Lorenzo Bruzzone, V.P. Professional Activities
IEEE GR.

Maria Sabrina Greco, V.P. Publications IEEE AESS Fabiola Colone, V.P. Membership Services IFFF AESS!

#### 15:00 - 16:20 Oral Session 5: SAR interferometry (Chair: Andrea Monti Guarnieri)

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16:20 - 16:40 Closing Session (Debora Pastina) & Awards ceremony (Fabio Dell'Acqua, Maurizio Di Bisceglie, Danilo Orlando, Roberto Seu) The 2019 Radar and Remote Sensing Workshop (RRSW2019) is the 3rd Edition in the series of workshops promoted by GTTI, the Italian Information and Communication Technology group.



14:00 - 15:00 Update from the IEEE societies

Maria Sabrina Greco, V.P. Publications IEEE AESS Fabiola Colone, V.P. Membership Services



# Mentoring Program – Objective #3 Monitor and Stimulate Mentors/Mentee interactions

- Perform a survey across the Mentor/Mentee pairs to get feedback
- Ask Mentors to act as liaison between AESS and Mentees by forwarding messages that could be of interest to them:
  - New initiatives focused on young members
  - Award nomination deadlines
  - Conferences/Journal Special Issues deadlines
  - Job opportunities



# Mentoring Program – Objective #3 Monitor and Stimulate Mentors/Mentee interactions

- Investigate appropriate process to establish an annual award for the best mentee:
  - Mentors could be the nominators.
  - Selection to be based on Mentor's comments as well as on documented AESS related activities + short video?
  - The award could be linked with (or leverage) the IEEE AESS Engineering Scholarship Program (how many applications per year?)
  - The selected Mentee could receive a nominal prize (free registration to conferences, free tutorial)
  - Prominence should be then given to the recipient (e.g article in the QEB)

### Examples of successful mentorship:

Walt Downing with Garrett Hall and Andres Tapia

Interactions focused on the development of "soft skills" such as interpersonal communications and leadership within the context of professional societies.



Ganesh Subramanain with Tamil Selvan and Arvind Sundaram

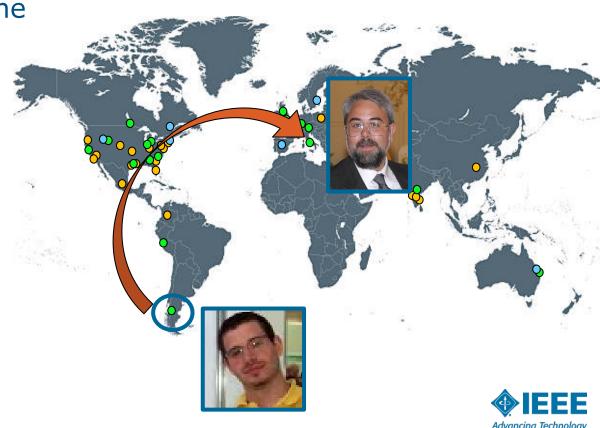
Ganesh trained his mentees on aeronautical basics for drones



Another example of successful mentorship:

Pierfrancesco Lombardo with Octavio Cabrera Morrone

- Octavio joined IEEE and AESS in order to join the Mentoring Program.
- He started his mentorship relation with Prof. Lombardo in 2018.
- Currently he is spending a few months at our lab in Rome.



## **Mentoring Program – Objective #4 Give prominence to the success of the program**

- "Mentoring Program in Action" in the QEB
- Article on mentoring in the magazine
  - This article should be less about the program and more about mentoring per se.
  - Ideally, it should be the type of article a member will put in front of a student or YP he or she cares about professionally and says "you might like to read this".



### Articles in the last QEB editions

2019 1st Qtr







As a part of IEEE AESS Mentorship program, Dr. Ganesh Subramanian and his mentees Aravind and Tamilsevan, successfully rebuild a Hexa copter and Octocopter at their 'Team Dronix' research lab which is located Panimalar Institute of Technology, Chennai, India during October 2018 to January 2019.

The major components were replicated using 3D printer and few of other were semi customized. The Octocopter will be used in RFID based Smart Vehicle Parking System and the Hexacopter with the payload capacity of nearly 6 Kg will be utilized for delivery purpose in a factory environment. They did test both drones on manual pilot mode and advancing towards making them in autonomous mode.

#### **AESS Professional Networking and Mentorship Program in Action**

By Garrett Hall and Walt Downing

The AESS Professional Networking and Mentoring Program offers opportunities for active engagement and collaboration between experienced and young AESS members. The program allows participants the complete flexibility to manage the frequency, duration, and method of interaction in a way that suits both the Mentor and Mentee. As an example of collaboration, this quarterly feature highlights the interactions of professionals and students in the IEEE Central Texas Section - San Antonio.



a collaborative event with UTSA's IEEE AESS/HIK/RAS student chapters along with Tau Beta Pi activity). Students working together to build photosensitive

In 2016, Walt Downing (IEEE Life Senior Member) and Garrett Hall (IEEE Student

Member) joined into a mentor/mentee relationship. Garrett was then the AESS Undergraduate Student Representative and Walt was AESS VP of Technical Operations. Garrett helped develop the AESS Professional Networking and Mentoring Program and was eager to put the concept into practice. Garrett and Walt decided to focus their interactions on the development of "soft skills" such as interpresonal communications and leadership within the context of professional societies that rely on the efforts of volunteer members. They met monthly, usually in face-to-face meetings or by telephone, to discuss Garrett's plans and progress toward his educational goals, career objectives and professional development.

Garrett attends the University of Texas at San Antonio (UTSA), where he received a BSEE in 2017, and is currently working on a master's degree in electrical engineering. He is active in several student organizations at UTSA, including the IEEE Student Branch, Tau Beta Pi engineering honor society, and the Kappa Upsilon (KU) chapter of Ets Kappa Nu (IEEE-HKN). Garrett began to involve some of the student leaders of these organizations in the mentoring activities. For example, he asked Walt to become the industry advisor for the IEEE-HKN KU Chapter officers. The monthly mentoring sessions evolved into a series of meetings with the student leaders and, occasionally, with their faculty advisor. These meetings are conducted on a month by month basis over the course of dinner in a casual atmosphere with the current officers from the student Chapter. The meetings focus on celebrating the success of the individuals and Chapter, discussing the implementation of student programs, and creating opportunities within the engineering community.

Through these interactions, Walt joined into a mentor/mentee relationship with Andres Tapia, the current president of Tau Beta Pi at UTSA. Andres and Garrett have worked, with Walt's guidance, to develop technical workshops for students, integrate student chapter activities on campus, create high school outreach activities, and host speaker events covering topics in computer vision, space sciences, and autonomous vehicles. The mentorship has made a significant impact, as seen by the programs and initiatives developed from it.

Under Walt's guidance, Garrett expanded Chapter activities beyond IEEE to include majors from computer science and mechanical engineering departments. They meet monthly for leadership development activities. By interacting with a more diverse group of students, the student body at UTSA can access a larger pool of technical talents that would not otherwise be present to them. This is one of the many ways AESS mentoring can provide the engineering community with its values and culture.



Pictured from left to right: Industrial Advisor meeting with Tiffany Tabourne, Argali Moctezuma, Garrett Hall, Michael Palacious, Walt Dawnina, Anna Arroya

## **Committee Members**



Fabiola Colone



Judy Scharmann



Francesca Filippini



Fredrik Gustafsson



Kameron Lacalli



Lorenzo Lo Monte



Sean Malek

...and invaluable help offered by



Walter Downing



Michael Noble



Ethan Lin

