

IEEE President's Report

José M. F. Moura, 2019 IEEE President and CEO

IEEE Region 8 Meeting

Valletta, Malta

16 March 2019



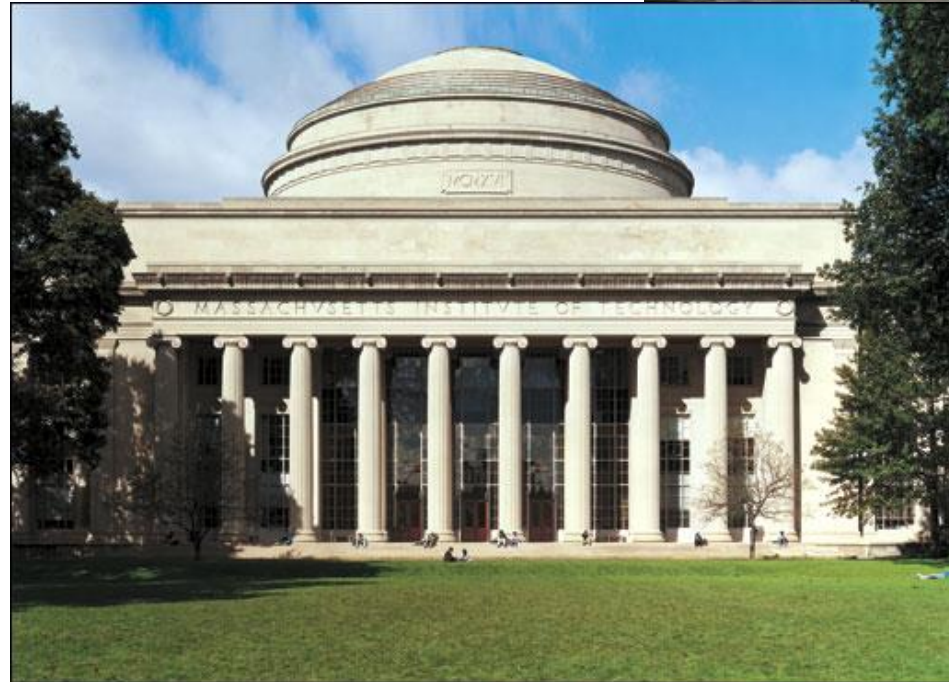
Brief Bio

- Born, raised Mozambique



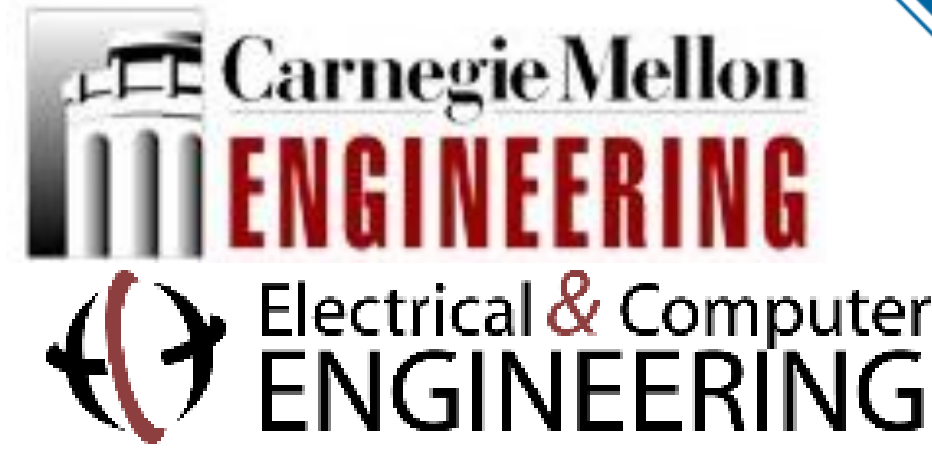
Brief Bio

- Born, raised Mozambique
- Studied in Portugal (IST)
- Doctor Science in US (MIT)
- CMU Professor



Brief Bio

- ▶ Philip L. and Marsha Dowd University Professor
Carnegie Mellon University, Pittsburgh, PA, USA
- ▶ President and co-founder of SpiralGen
- ▶ Founding member of IEEE Portugal Section
- ▶ 2012 IEEE Division IX Director
- ▶ 2016 Vice President of IEEE Technical Activities

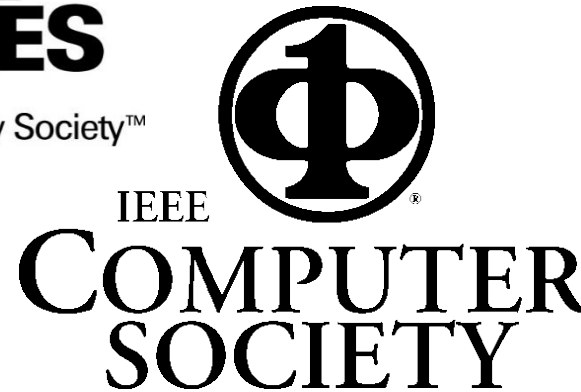


IEEE at a Glance

- 422K+ members, 160+ countries
- 1,100+ staff, 10 offices, 6 countries
- \$500M business
- 46 Societies/Councils
- 1,966 conferences, 561K+ participants, 103 countries
- 4.5M distinct documents in *Xplore*
- 200+ journals
- 1,250 active standards (Wi-Fi, Bluetooth,...)



39 Societies + 7 Councils



IEEE: Diverse Membership

- 339 sections
- 2,116 chapters
- 3,285 student branches
- 543 affinity groups

R1 to 6: 178,937 (43%)

R7: 17,253 (4%)

R9: 18,224 (4%)

R8: 77,519 (18%)

R10: 130,527 (31%)

- 59 sections, 10 subsec.
- 558 chapters
- 594 student branches
- 95 affinity groups

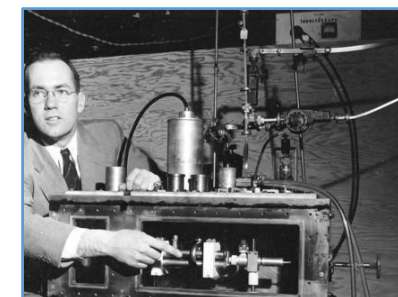
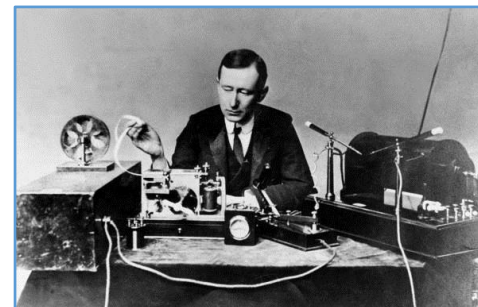
TOTAL MEMBERSHIP 2018: 422,460

IEEE ... Changing Our World

► Just a Few of our Nobel Laureates

- **Guglielmo Marconi 1909**
- Willem Einthoven 1924 (ECG)
- Edward Appleton 1947 (Radiophys.)
- **Charles Townes 1964**
- Nicolaas Bloembergen 1981 (Laser spectroscopy)
- Herbert Kroemer 2000 (Semiconductor heterostructures)
- **Gérard Mourou 2018**
- 7 - Arthur Ashkin 2018 (Optical tweezers)

Wireless
Telegraphy



MASER



Laser



Some Recent Technical Communities



Where To Go From Here

Think about the future

- ▶ **IEEE is a strategic organization: We can't stand still**
- ▶ **Board of Directors held a strategic retreat (Jan 2019, Cascais, Portugal)**
- ▶ **Major concern: How better serve professionals in IEEE's areas of interest**
- ▶ **Some of the questions:**
 - **What do we offer**
 - **Membership cost is too high**
 - **Why should young professionals be members**
 - **Industry professionals have different interests from academics**
 - **Professionals in different countries have different needs**



Membership

we are BIG



... can we GROW



... become VERY BIG

► **What if 4 Million Members?**



Opportunity: Membership

2018: 422,460



Opportunity: Membership

Dramatically increase IEEE membership

► The 4MM Opportunity

- Double/triple our membership



5.08M

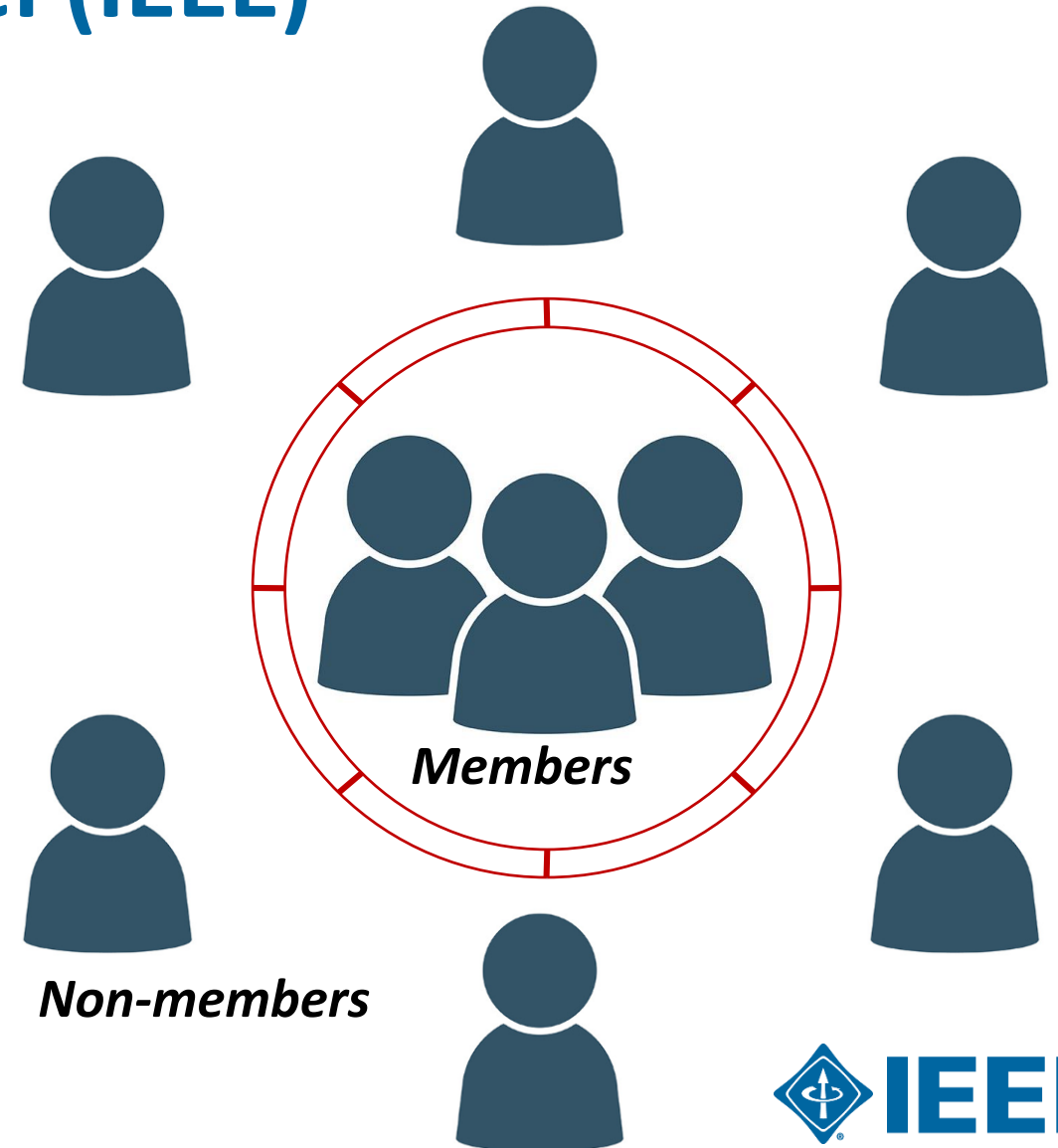
— IEEE Memberships
— Society Memberships
— IEEE Xplore Average Monthly Unique Visitors

422,460



Fee-based Association Model (IEEE)

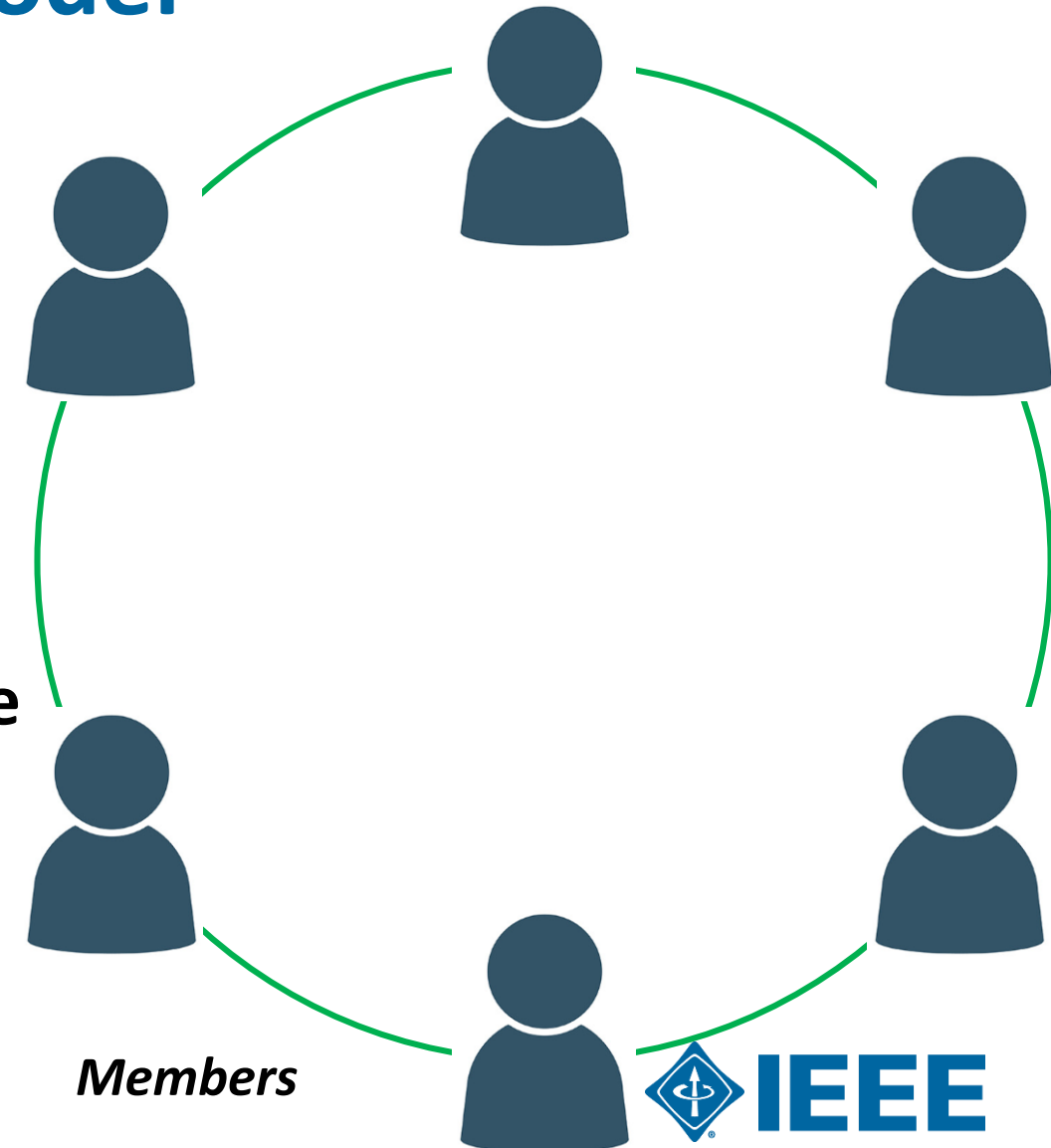
- ▶ Paywall defines membership
- ▶ Membership affords free and discounted services: publications, conferences, insurance, other
- ▶ Some member services available to non-members for a greater fee
- ▶ Members attracted by:
 - Technical Collaboration
 - Professional Recognition
 - Continuing Education



From Ray Liu's presentation, Jan 2019

Social/Professional Network Model (e.g., Facebook, LinkedIn)

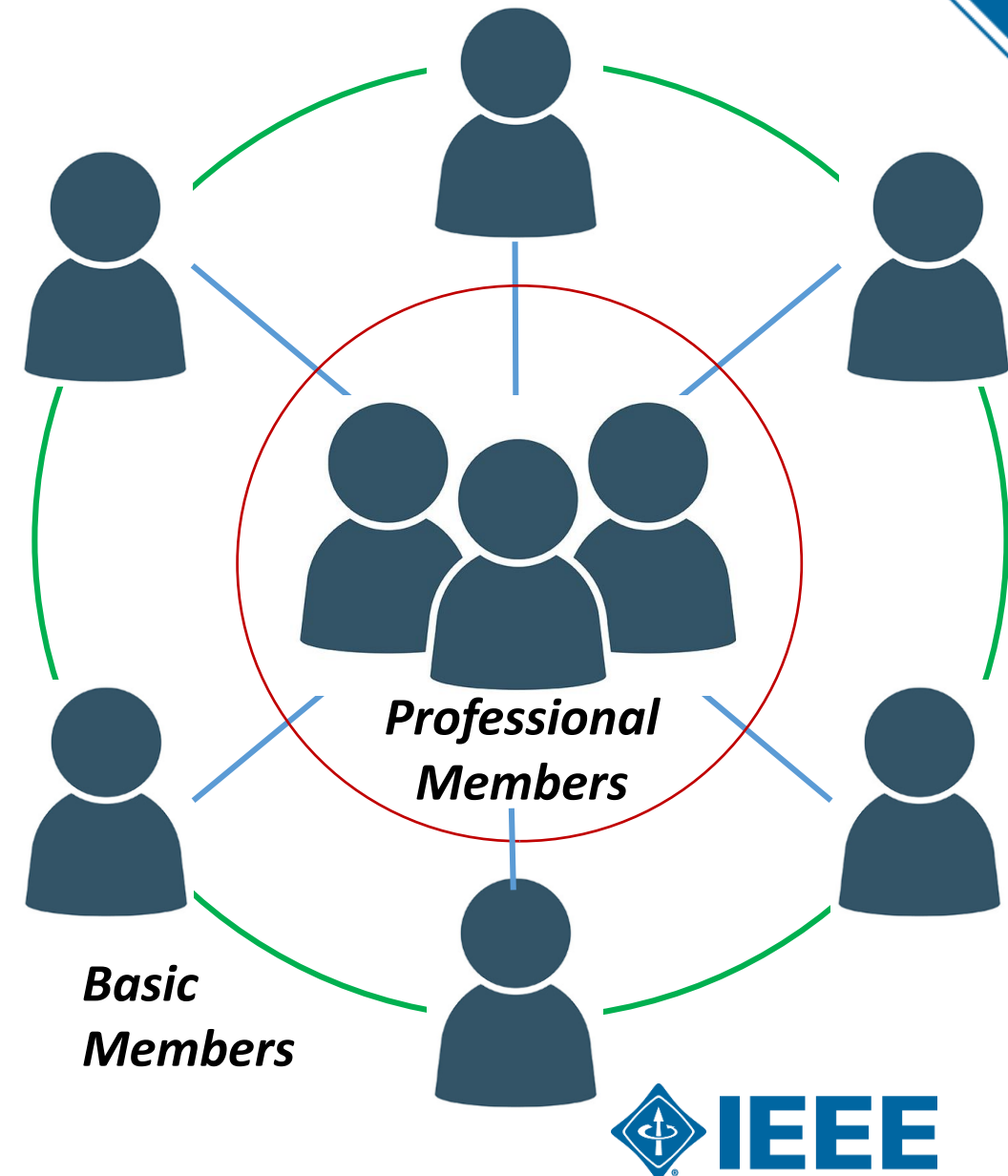
- ▶ Peer-based
- ▶ Members pull other members
- ▶ Apparently free to join
- ▶ Users allow targeted advertising and mining of personal data
- ▶ Some value-added services available for a fee
- ▶ Members attracted by:
 - Friendship Collaboration
 - Personal Recognition
 - Peer News



From Ray Liu's presentation, Jan 2019

Merged Models

- ▶ Core “Professional Members” – fee based
- ▶ “Basic Members” through engagement
- ▶ Network – peer-provided services
- ▶ Network – value-added services
- ▶ Members attracted by:
 - Technical Collaboration
 - Professional Recognition
 - Low-cost services
 - Revenue potential for service providers
 - Continuing Education opportunities
- ▶ Network engagement profiles:
 - Individual, corporate, entrepreneur, ...



From Ray Liu's presentation, Jan 2019

Membership: The 4MM Opportunity

The opportunities ahead

- ▶ Leverage our numbers:
 - Our 4.5M *Xplore* articles – mine the data
 - Our 300K newly uploaded papers every year
- ▶ Leverage our diversity, geography
- ▶ Offer other value opportunities:
 - Beyond the “paper” conference, combine academics, career counseling, job fairs, expos, mentorship, entertainment
 - Serve the Young Professionals, industry ...
 - Entrepreneurship
- ▶ Education:
 - New technologies, new professionals, new parts of the world...



How Do We Go About IT?

Board Ad-Hocs

- ▶ **Membership (Chairs VP MGA Grosz and VP TAB Liu)**
 - New models
 - Value offered to different segments
 - Infrastructure
- ▶ **Diversity & Inclusion and Professional Ethics (Goldsmith)**
- ▶ **Financial Transparency (Joe Lillie)**
- ▶ **Publications and Open Access (Benedetto)**
- ▶ **Open IEEE Governance (Verboncoeur)**
- ▶ ...



2019: A Year in Transition for IEEE

Thank you to all volunteers for what you do day in and day out

56 years IEEE R8



2019: A Year in Transition for IEEE

Think Big!
Think Smart!

