



# IEEE



## UALBANY STUDENT BRANCH

General Interest Meeting

# What is the IEEE?



The world's largest technical professional organization for the advancement of technology

The Acronym:

- Institute of Electrical and Electronics Engineers

Mission statement:

- The IEEE's core purpose is to foster technological innovation and excellence for the benefit of humanity.

What the IEEE does:

- The IEEE publishes nearly a third of the world's technical literature in electrical engineering, computer science, and electronics. This includes approximately 200 transactions, journals, and magazines published annually.
- IEEE sponsors more than 1,900 annual conferences and events worldwide, curating cutting-edge content for all of the technical fields of interest within IEEE.
- IEEE is a leading developer of international standards that underpin many of today's telecommunications, information technology, and power-generation products and services.
- And Much Much More.

# Who are the IEEE?

The IEEE is composed of hundreds of thousands of members from all around the world, collaborating on various technical projects.

“There are more than 419,000 IEEE members in over 160 countries, more than 50 percent of whom are from outside the United States. IEEE members are engineers, scientists, and allied professionals whose technical interests are rooted in electrical and computer sciences, engineering, and related disciplines.”

“As the world's largest technical professional organization, IEEE offers a number of ways to get involved with technical and local communities. These communities are active participants in research and authorship, conferences, and important conversations about today's most relevant technical topics locally and globally.”

# IEEE Membership

The IEEE is an organization that can be participated in through one's entire professional life, from student to renown professional.

The IEEE has grades of membership for people at every point in their career!

- **Student Member Grade:** Full Time Students earning a 3-5 degree in in IEEE-designated fields.
- **Member Grade:** Professionals with a 3-5 year degree or 6 years of work experience in an IEEE-designated field.
- **Senior Member Grade:** 10 years of professional practice and significant performance or achievement in publication, responsibility, or management.
- **Fellow Member Grade:** Only available by nomination and for having extraordinary achievement in an IEEE-designated field. Only 0.1% of IEEE members can become fellows each year.

# Special Guest: IEEE Life Fellow, Kim L. Boyer

Professor Boyer has had an extraordinary technical career, both in and out of academia. After completing a PhD in electrical engineering from Purdue in 1986, He began working as a professor at Ohio State where he stayed for 22 years, earning a full professorship. He went on to work as a department head at RPI in 2008 before moving to UAlbany where he has been the dean of our CEAS department since 2015.

Professor Boyer has served in many technical leadership roles (far too many to fit on this slide) and held various prestigious fellowships. He has been also been an active researcher and published seminal papers in a multiple areas such as computer vision and medical imaging, which are his primary research interests.



# Special Guest: IEEE Life Fellow, James R. Moulic

Dr. Moulic has had an extraordinary career in industry and now has begun an equally impressive career in academia. After earning his PHD in electrical engineering in 1986, he went on to have a prolific career with IBM during which led IBM's worldwide research activities on wireless, mobile systems and cloud based services. He helped develop numerous supercomputers, including Los Alamos National Lab's Roadrunner, the world's first petaflop supercomputer. Perhaps his most famous project, Dr. Moulic led the Deep Blue computer chess project, initiating the first exhibition match events with World Champions Garry Kasparov and Anatoly Karpov.

He has more publications and patents than I could ever hope to fit on this slide.



Big Thank You to Our Guest Speakers!

# What is The IEEE Student Branch?

- The UAlbany IEEE Student Branch is a SA Approved Organization that represents the IEEE on campus.
- We facilitate and affirm the values and goals of the IEEE and provide our members with technical events and support they need to advance to the next stage of their careers.
- We provide members with opportunities to grow their technical skills in a supportive and professional environment through hands on projects, workshops, and leadership opportunities.





# Who Are We? (Meet the IEEE)

The IEEE is run by a dedicated six person team of students from a variety of backgrounds who are all qualified and accomplished in their own rights.

These Six form the E-board:

- James T. Oswald (Chair)
- Connor Walsh (Vice-Chair)
- Carolyn Kaminski (Graduate Vice-Chair)
- Joshua Cho (Treasurer)
- Tony Comanzo (Secretary)
- Robin Kim (Webmaster)

The Faculty Advisor helps us connect with the community and technical faculty:

- Professor Jonathan Muckell (Faculty Advisor )

# What do we Offer?

- A Broad Lineup of technical talks, company talks, workshops, hands on projects, collaborations, hackathons, interview practice, resume review, leadership opportunities, and much more!
- We pride ourselves on the vast array of offerings we provide our members with. Even in the face of this pandemic, we have gone fully virtual and offer just as much if not more than we were able to in person thanks to our thriving online presence.

# Workshops

- The brunt of our scheduled events will be workshops which will be interactive virtual events centered on a certain technical topic hosted by an Eboard Member.
- We have currently booked 11 workshops for this semester, but we are more than happy if any members want to host their own workshops!
- There are potentially four kinds of virtual workshops to look forward too this sem:
  - **New Presentation:** A presentation and demo on a tech topic developed just for this workshop.
  - **Stock Presentation:** A premade presentation on a tech topic given by someone who knows about it.
  - **Coding Interview Practice:** Practice for the infamous whiteboard programmer interview with us!
  - **Technical Watch Party:** A watch party of a technical talk or video, followed by discussion and questions.

# Workshop Schedule

- We will be hosting one workshop a week.
- You are not required to attend them, just come check the ones that look interesting to you.
- The workshops follow an alternating Wednesday-Thursday pattern to give everyone an opportunity to attend.
- All workshops will be 8PM EST

Workshop #	Date
1	Thursday 9/10/20
2	Wednesday 9/16/20
3	Thursday 9/24/20
4	Wednesday 9/30/20
5	Thursday 10/8/20
6	Wednesday 10/14/20
7	Thursday 10/22/20
8	Wednesday 10/28/20
9	Thursday 11/5/20
10	Wednesday 11/11/20
11	Thursday 11/19/20

# Talks

- Throughout the semester we will be hosting virtual talks from speakers as we book them.
- The topics covered range from professors talking about their research, members of industry discussing their careers, and even representatives of companies giving overviews of what they are working on.
- Talks will be scheduled at the speakers convenience and could fall on any day at any time, so keep your eyes peeled for talk announcements, which we will give you a heads up for at least one week in advance.

# A Thriving Online Community

<https://discord.gg/BMsSPtd>

- The UAlbany IEEE is proud of its large online presence and community.
- We use Discord as our primary communication platform and are partnered with some of the largest UAlbany servers such as
  - The Official SUNY Albany Discord
  - The UAlbany Computer Science Discord
  - The UAlbany Cyber Defence Organization Discord
- The Discord is used to chat with other users, collaborate, get help with projects, resume reviews, and much more!
- We have a number of members online at any given time to chat about technical topics when you're feeling like it.

# Leadership Opportunities

- We offer a wide range of opportunities to take your participation and leadership skills to the next level.
- Besides running for the E-board positions, We are also looking for a J-Board (Junior Eboard) this year, who will shadow and assist the E-board and learn about the internal workings of the club before going on to run for E-board themselves.
- We will gladly take speakers and workshop hosts, if you want to host a workshop or a talk, just ask!
- We are looking for technically apt students to serve discord helpers to assist us all day coverage for discord questions channels.

# Personal Project

With Robin!



# Build your interest

There are so many fields you can contribute with your knowledge of computers

- Sound engineering
- Web developer
- Hardware engineering
- Robotics engineering
- Data Science

# Upgrade your Resume

- Unfortunately not everyone is going to be hired
- Having experience on what you are interested in or field you want to work at stands out more to employer.
- School work may not be covering what you are interested in.

# IEEE Personal project

- Come up with personal study or project that you are interested in
- Tell us what you are going to work on
- End of semester, you can present/show your amazing work to others
- Update your resume!!!

# Link Share (useful)

<https://targetjobs.co.uk/career-sectors/it-and-technology/323039-why-your-computer-science-degree-wont-get-you-an-it-job>

# Wrap Up

- Any Questions? Feel free to ask them now.
- Join our discord, <https://discord.gg/43rHSq>
- Stay tuned for more info on next week's workshop, more info will be posted once we decide what it will be.

Thank You for Coming!