



Boston Section

Supporting students, working engineers and retirees through professional development, education and resources.

THE *Reflector*

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EDITORIAL

*CRYSTALIZING AND ADAPTING
TO LEARN FOR THE FUTURE*

EDITORIAL BY BRUCE HECHT,
STUDENT ACTIVITIES CHAIR,
IEEE BOSTON SECTION

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Boston Section

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Bruce Hecht

Crystalizing and Adapting to Learn for the Future

By Bruce Hecht, Student Activities Co-Chair, IEEE Boston Section

The city of Boston draws runners from around the world to race in the annual Boston Marathon, celebrating and joining the community together. I was at Boston's Logan airport,

to pick up my son as he returned to Boston, although not (yet) a marathon runner, our family has the fun run spirit. While waiting I met one of the organizers of a marathon travel team in from Spain. I asked about what you say for the Spanish runners of the Marathon and he replied, "take it calm – take the time to be in running and keep going to the finish line." This idea has resonated in different contexts – building educational programs, new technologies, and seeking to integrate needs for transformative change – all activities that feel more like a marathon to reach the goal!

Arthur Brooks, who I admire as an inspiring leader in several fields, a thoughtful and engaging writer and professor at the Harvard Kennedy School, presented a discussion this week on careers and personal transformation. After serving in a variety of career roles, from his position leading a world's top think tank, he described his own experience in reflecting on change and in researching his own pathway for the perspective on where next to grow. From this experience he developed a contrast between driving innovation and in crystalizing experiences. In the first case, gaining expertise in a career, for example in using technical expertise, applying knowledge, and developing skills. In the second case, building on experiences and wider view of multiple perspectives, leading to crystalizing the viewpoints with roles in mentoring, coaching, and teaching.

An open question is how to best learn and to contribute to future adaptation. The R&D and application of technology creates opportunity and competitive conditions. At a recent talk, the MIT economist David Autor addressed the ongoing question of how will automa-

tion, and the rapidly growing machine learning affect the future of work? Autor and a team of researchers have studied these questions in the MIT Shaping the Future of Work program. Taking the analogy of the development of new technologies in the generation of aircraft provided an illustrative example. The Wright Brothers first powered flight at Kitty Hawk, North Carolina, in 1903, happens to be the same year as the founding of the AIEE Boston Section (the AIEE merged with IRE to form the IEEE). Autor describes that the introduction of new technology does not only automate or replace what humans are already doing - the airplane did not automate how humans already flew – prior to the new technologies for aviation, aeronautics, engines, and flight controls, humans did not have powered flight as an option. With new technologies, human potential is expanded as new human activities are enabled and generated by creative innovation and invention.

A call to action for our IEEE Boston community! Share your story as you are researching and exploring your pathway and learning journey. What are the questions you are encountering? Who do you find are the mentors, coaches, and teachers? How might you add to your roles in taking these ideas forward and encouraging your fellow members of the IEEE Boston community team? What are the questions and opportunities that you and your teams are encountering with new technologies?

Examples of upcoming events in the IEEE Boston Section that our IEEE Chapters, Members, and leaders are developing may be found in this edition of the IEEE Boston Section e-Reflector. One program that I have had the opportunity to contribute to organizing this spring with friends, colleagues, and staff from the IEEE Sensors Council, and will be hosted at Northeastern University with Professors Ravinder Dahiya and Srinivas Tadigadapa. The event will feature a Boston-flavored edition of the IEEE Sensors Council program, Sensors in Spotlight. Hosted at Northeast-

ern University's Interdisciplinary Science and Engineering Complex (ISEC) in Boston, join us to hear stories of sensing enables technological change and how teams are working to provide innovative solutions to challenging missions.

Celebrating our community is an area where the IEEE Boston Section has the honor to recognize many achievements and technology leadership. Thanks to IEEE Boston Section Chair Karen Panetta and 2024 IEEE Boston Section Chair, Máira Marques Samary, and IEEE Boston Section staff for the rebooting of the IEEE Boston Section Fellows Recognition and Awards last month at Tufts University School of Engineering. Also this month, global IEEE awards will be celebrated, as the IEEE Awards moves from hosted at the Boston Section in 2024 to this year's program in Tokyo, Japan.

For more on these topics – look for insight and ask about how you could participate and connect to:

1. IEEE Boston Section Awards and Fellow Recognition

2. IEEE Awards

3. IEEE Sensors in Spotlight

4. IEEE AI Coalition and the IEEE Boston Section's 2025 IEEE International Conference on AI and Data Analytics (ICAD 2025)

5. IEEE Future Directions – Future Technology Forum

I invite you to join where you see resonance, seek your pathway for future growth, and send us a letter at the IEEE Boston Section e-Reflector, or let's meet up soon to hear what keeps you running and who is helping you reach the next finish line goal!

Bruce Hecht is the IEEE Boston Section Student Activities Co-Chair, IEEE Sensors Council Industry Committee Member, and the IEEE Future Directions AI in Healthcare + IEEE Future Technology Forum. Bruce is the founder of VG2PLAY, based at the Cambridge Innovation Center, Senior Design Engineer with ASML Research, Development & Engineering, and a research affiliate with the Global Teamwork Lab at MIT System Design and Management (SDM). Bruce's family adventures forward from Brookline, MA, Toronto, ON, and Montreal, Quebec, Canada.

Coming in June '25!

IEEE International Conference on Artificial Intelligence and Data Analytics

Registration is Now Open
www.ieee-icad.org



Nominations for 2025 Region 1 Awards are Now Open!

Award nominations are due no later than Friday, May 30, 2025

Through its Awards Program, Region 1 advances the interests of its members by recognizing their significant contributions and service in advancing IEEE-designated fields of interest. With this, the image and prestige of the organization, its members, and the profession are all enhanced.

Do you know someone that is deserving of one of the following awards? Then please consider nominating your fellow peer or colleague for a Region 1 Award this year!

Submit your nomination here: <https://ieeecure-platform.com/a/solicitations/1213/home>

Region 1 Awards – Please follow links for more information on each award category.

[Professional Achievement Awards](#)

- Technological Innovation (Academic)
- Technological Innovation (Industry or Government)
- Managerial Excellence in an Engineering Organization
- Outstanding Teaching in an IEEE Area of Interest (University or College)
- Outstanding Teaching in an IEEE Area of Interest (Pre-University or College)
- Enhancement of the relationship between IEEE and Industry
- Enhancement of the IEEE or Engineering Profession's Image with the Public
- Outstanding Support for the Mission of the IEEE, MGA, Region 1 and/or Section

[Lifetime Service Award](#)

The William Terry Distinguished Service Award

[Alex Gruenwald PACE Award](#)

[Recognizes a Section's successful professional activities program](#)

[Young Professionals Award](#)

[IEEE-USA Awards](#)

[IEEE Awards](#)

For questions, please contact Robert M. Pellegrino, Region 1 Awards and Recognition Chair at bobpellegrino@ieee.org.

IEEE Boston Electromagnetic Compatibility Chapter – 5:00 PM, Monday, May 5

History and Future of Measurement Methods in ANSC C63.4

Location: TÜV Rheinland North America, Technology and Innovation Center. Co-Sponsored by: ETS-Lindgren and Rohde & Schwarz. Complimentary parking is available.

Speakers: Fantastic speakers and a live demonstration within a new state-of-the-art 10 meter chamber.

Register [here](#). There is NO CHARGE to attend, but you must register in advance. All IEEE members and guests are welcome to attend.

This is a unique opportunity to learn and network with members from ANSC C63.4 and contribute towards discussions which will influence future measurement methods!

Event Schedule

Date: Monday May 5, 2025

- 5:00 PM Registration/check-in, complimentary dinner and refreshments
- 6:00 PM Welcome from TUV Rheirland NA and IEEE EMC Chapter
- 6:10 PM “The History of ANSI C63.4”
- 6:30 PM “Addressing Under-Testing in EMC Emissions Measuremets A Comparitive Analysis of Boresighting and Linear Scanning Methods
- 7:00 PM “Don’t Get Tilted”
- 7:30 PM Live Demonstrations of Boresight and Linear Scan Methods in 10m Chamber
- 8:15 PM Reconvene in meeting room Q & A and Closing Comments
- 8:30 PM Adjourn

see presentation abstracts and speaker bios below

History of ANSI C63.4

By Art Wall, former FCC Representative to ANSC C63.4, Columbia, MD

Art Wall was one of the primary authors of the Federal Communications Commission (FCC) document MP-4 “FCC Procedure for Measuring RF Emissions from Computing Devices” – the document which heavily influenced the first edition of ANSI C63.4. This presentation will discuss the history of the measurement techniques specified in C63.4 and provide some context behind the procedures called out in the standard.

Addressing Under-Testing in EMC Emissions Measurements: A Comparative Analysis of Boresighting and Linear Scanning Methods

By Zhong Chen, ETS-Lindgren, Cedar Park, TX

This presentation examines the critical differences between antenna boresighting and linear scanning techniques during height scans in emissions measurements for frequencies above 1 GHz. At higher frequencies, emissions from typical equipment under test (EUT) exhibit complex radiation patterns. Capturing the true peak radiation becomes a statistical challenge. This presentation explores both experimental and simulation studies conducted by researchers to analyze these phenomena. Additionally, simulations are performed to illustrate and corroborate the findings. By addressing the technical limitations of linear scanning and emphasizing the advantages of boresighting, this discussion seeks to contribute to standards development and enhance the accuracy and reliability of EMC emissions measurements.

Don’t Get Tilted

By Nicholas Abbondante, Intertek, Boxborough, MA

This presentation will review the rationale and concepts behind the antenna tilting changes in the C63.4 draft standard. Currently, test labs that are making measurements using both US and international standards need to be aware of and capable of supporting multiple different methods of testing above 1 GHz. After over a decade of testing using antenna tilting in C63 measurement standards, lessons have been

learned about the pros and cons related to the use of tilting, which will be discussed in this presentation.

LIVE Demonstration

By Bob Mitchell, TÜV Rheinland

As technology has evolved over the past decades, the equipment and methods that are used to test this technology is continuously evaluated to ensure that the best methods are being used. This demonstration will compare the Linear Scanning and Boresight Scanning methods when used at a 3m test distance with a 1m height reference. Identical antennas, identical measurement receivers, identical model of test cables, and identical masts will be utilized during this demonstration. The TÜV Rheinland Chamber was designed to run dual axis measurements as part of the 2025 automation program TÜV is implementing. Thus, the use of the TÜV Rheinland chamber has the exact capability to provide the comparison that is needed for this demonstration.

One test sample will be set up on the 0.8m high foam table, using two identical horn antennas taking measurements from 1 to 18 GHz at the same time and scanning from 1-4m in height. Given the specific parameters of the test, this demonstration is designed to show the similarities and differences of Linear and Boresight scanning methods. The goal is to provide additional insights on how best test methods can be developed as technology changes.



About the Speakers

Art Wall retired from the Federal Communications Commission in 2005 as Deputy Chief of the FCC Laboratory with over thirty-five years of experience in radio regulatory issues, Electro-Magnetic Compatibility (EMC), standards, and conformity assessment.

Art was also a consultant for the government and industry for an additional 14 years in the same field. He authored and participated in the development of numerous mandatory and voluntary standards for intentional and unintentional radiators for

controlling radio interference. He was active in ANSI C63 for over 40 years and was international Secretary and Chairman of Subcommittee A (dealing with measurements and instrumentation) of the International Special Committee for Radio Interference (CISPR) for over 20 years. He also participated in developing and implementing the US-EU MRA and the APEC MRA for telecommunication equipment. Mr. Wall is a Life Fellow of the Institute of Electrical and Electronic Engineers (IEEE) and Life member of the IEEE EMC Society. He has a BSEE from the University of Maryland and an MSEE from George Washington University.

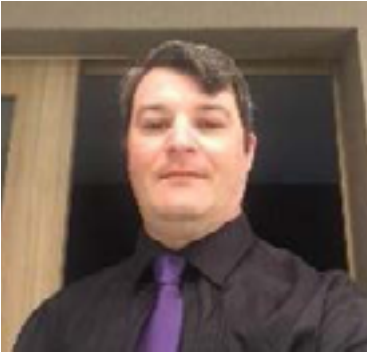
He may be reached at artwall43@gmail.com.



Zhong Chen is Chief Engineer at ETS-Lindgren, located in Cedar Park, Texas. He has over 25 years of experience in RF testing, anechoic chamber design, as well as EMC antenna and field probe design and measurements. He is an active member of

the ANSC C63® committee currently serving as Vice-Chair and is the immediate past Chair of Subcommittee 1 which is responsible for the antenna calibration (ANSI C63.5) and chamber/test site validation standards (ANSI C63.4 and the ANSI C63.25 series). Mr. Chen is chair of the IEEE Standard 1309 committee responsible for developing calibration standards for field probes, and IEEE Standard 1128 for absorber evaluation. Currently he is a member of the IEEE EMC Society Board of Directors and a former member of the Antenna Measurement Techniques Association (AMTA) Board of Directors. He is a past Distinguished Lecturer for the EMC Society and is recognized as an AMTA Fellow. His research interests include measurement uncertainty, time domain measurements for site validation and antenna calibration, and development of novel RF absorber materials. Several papers authored and co-authored by Mr. Chen have received best paper recognition at global conferences. Zhong Chen received his M.S.E.E. degree in Electromagnetics from the Ohio State University at Columbus.

He may be reached at zhong.chen@ets-lindgren.com.



Nicholas Abbondante has served as Intertek's Chief EMC Engineer since 2013, responsible for technical support of Intertek's global network of 24 EMC labs. In his 22+ years with the company, he has been involved in testing a wide range of radio and electronic equipment to EMC re-

quirements for regulatory domains around the world, specializing in transmitters and medical devices. He is the Technical Manager of Intertek's TCB program and is TCB Council Board Vice Chair, and serves as the CISPR/A Secretariat. An active participant in many ANSC C63 standards projects, he is chair of both C63.31 for ISM device measurement and C63.25.3 for 18-40 GHz test site validation, and was recently elected as the incoming chair of Subcommittee 4 for wireless and ISM equipment measurements. He is also a working group member of C63.10 and C63.26 for radio testing, C63.4 Emissions, C63.16 ESD, C63.33 EAS immunity and the recently completed C63.2 Receiver, C63.29 Lighting and C63.30 Wireless Power Transfer standards. Nick has a Bachelor's degree in physics from the Worcester Polytechnic Institute (WPI) in Massachusetts, USA.

He may be reached at nicholas.abbondante@intertek.com.

Bob Mitchell is the Director of Laboratory Technology and Innovation at TÜV Rheinland, based in Boxborough, MA. Bob also holds the role of EMC technical manager for TÜV Rheinland of North America. Along with the roles and tasks Bob does for TÜV Rheinland, Bob is one of the USNC member experts for the ISO, CISPR D, SAE, ANSC C63®, and 5GAA committees. Bob is also an active member of the Advisory Committee for Electromagnetic Compatibility for the IEC representing TC125, TC47 and the US National Committee. Over the course of his career, Bob has presented many workshops at the IEEE EMC+SIPI Symposiums, authored technical papers, and has supported technical data for development of many new EMC standards across the organizations. In the role of Director of Laboratory Technology and Innovation for TÜV Rheinland North America, Bob has the responsibility for developing and expanding test capabilities, opportunities, and test facilities in the various markets for TÜV Rheinland.



He may be reached at rmitchell@us.tuv.com.

In case of questions regarding location, please contact: Robert Mitchell, Director, Lab Technology & Innovation, TÜV Rheinland rmitchell@us.tuv.com Tel: +1 978 506 7027 Mobile: +1 978 436 1265

Got Something to Say? We'd Like to Hear It!

Please send your articles, opinions, event re-caps & photos and announcements to The Reflector at:

sec.boston@ieee.org

IEEE Boston Entrepreneur's Network – 7:00 PM, Tuesday, May 6

Storytelling to Attract Startup Investments

Location - Lasell University Science and Technology Center, Newton MA USA

Speakers: Sarah Leino, Matt Volpi and Dan Skiba

Event Registration Link: <https://bostonenet.org/events/storytelling-tips-for-your-startup-to-get-investment/>

Sarah Leino, Dell Technologies, is a seasoned strategist and storyteller with Dell Technologies, who excels at transforming complex challenges into compelling narratives. Her ability to distill intricate situations into clear, impactful stories has made her a trusted advisor to executives and leaders across various industries. Sarah's expertise in crafting visually engaging and data-driven messages ensures that every story she tells resonates deeply with her audience. Her collaborative approach makes her an invaluable asset in any context – from supporting difficult conversations to strategizing a complex go-to-market strategy.

Matt Volpi, Tavana Consulting, Inc., is a technology marketing veteran who provides content strategy, content marketing, product marketing, positioning, pricing,

commercialization, and go-to-market services for B2B, B2C, and D2C organizations in his work at Tavana Consulting, Inc. With a career-long focus on creating and marketing innovative new solutions that leverage technology to solve real-world challenges, Matt uses storytelling to connect exciting technological developments to the needs and pain points of potential and current customers. By demystifying complex concepts and focusing on relatable value propositions and use cases, Matt helps companies drive demand while overcoming buyer concerns and hesitancy. In addition to holding marketing leadership roles at venture-backed startups along with his experience working for Nokia, Sun Microsystems, and other technology companies, Matt has provided thought leadership, ghostwriting, copywriting, and strategic sales enablement services for companies ranging from robotics to enterprise software to consumer electronics to retail. For more information, visit Tavana Consulting, Inc.

Moderator/Organizer: **Dan Skiba**, Managing Director, Skiba Advisory Associates, ENET Co-Chair Vice President, Performance Films at CHASM Advanced Material

Storytelling to Attract Startup Investments

MAY 6, 2025, 7-8:30 PM

LASELL UNIVERSITY SCIENCE AND TECHNOLOGY CENTER, NEWTON, MA

SPEAKERS



SARAH LEINO
Dell Technologies



MATT VOLPI
Tavana Consulting, Inc.



DAN SKIBA
Managing Director
Skiba Advisory Associates,
ENET Co-Chair

MODERATOR

IEEE Boston Microsystems Chapter & Photonics Chapter – 6:00 - 8:00PM, Thursday, May 8

Closed Loop Precision Medicine: From Smart Bandages to Ingestible Low-Cost Diagnostics

Register at: <https://events.vtools.ieee.org/m/482236>

Abstract: The speaker will introduce a new paradigm of “Human in the loop” precision medicine, made possible by advances in flexible sensors, optics, microfluidics, drug delivery, and electronics. The closed loop approach is expected to be more effective in improving the health outcomes of individuals across broad demographics, as opposed to the current open-loop one-size-fits-all approach to medicine. The presentation will draw on examples from the speaker’s own interdisciplinary research projects. For instance, the speaker will showcase a novel toolkit of sensors, microfluidics, electronics, and drug delivery, all integrated onto a surgical suture, which realizes the vision of tissue-embedded diagnostics. Even electronic transistors and integrated circuits can be created on a single thread, giving rise to “free-form three dimensional integrated circuits.” The use of textile threads offers unique advantages such as wide availability, affordability, versatility of materials, and easy textile-based processing. The talk will also feature a project that employs additive manufacturing and laser micromachining to develop smart lab-on-a-pill devices that can spatially sample the gut microbiome in vivo. These ingestible pills have the potential to capture the

spatial microbial biogeography of the gut, providing valuable insights into host-microbiome interactions and opening up a new realm of ingestible diagnostics compared to traditional fecal analysis. The talk will conclude with a forward-looking perspective on the field of bioelectronics and the exciting possibilities it holds. More importantly, it will showcase knowledge gaps and how the biomedical circuits and systems community can help address those in near term and long term.

Sameer Sonkusale is a Professor of Electrical and Computer Engineering at Tufts University, where he holds joint appointments in the departments of Biomedical Engineering and Chemical and Biological Engineering. He also served as a visiting professor at the Wyss Institute at Harvard University and Brigham and Women’s Hospital of the Harvard Medical School during 2011-2012 and 2018-2019, respectively. In 2012-2013, Dr. Sonkusale also served as the Associate Dean of Graduate Education in the School of Engineering at Tufts University. He currently directs an interdisciplinary research group, the Nano Lab, which focuses on developing new devices and systems for healthcare, biology, life sciences, and the environment.

IEEE Microsystems & Boston Photonics Joint Technical Seminar

Closed Loop Precision Medicine From Smart Bandages to Ingestible Low-Cost Diagnostics

with Professor Sameer Sonkusale

Professor of Electrical and Computer Engineering at Tufts University

Distinguished Lecturer - IEEE Circuits and Systems Society



Registration Link

Thursday, May 8th, 2025

6PM – 8PM

MIT - Lincoln Labs
Forbes Rd Cafeteria

3 Forbes Road
Lexington, Massachusetts





2025 ANNUAL BANQUET

Come and join us for an evening of fun and networking!!!

Fusion Energy: Closer than you think *A CONVERSATION LED BY BENJAMIN BYBOTH OF COMMONWEALTH FUSION SYSTEMS*

Featuring: Buffet style dinner, cash bar and live jazz from Beacon Street Band

Date: Tuesday, May 13th, 2025

Time: Pre-dinner drinks at 6:00 pm
Program commences at 6:30pm

Location: Four Points by Sheraton Boston Newton
320 Washington Street
Newton, MA 02468

Registration Details

\$70 per Member* / \$80 per non-Member / \$35 per student

*Please email AMIVYAS@BU.EDU with your IEEE PES member number for the member discount code

\$600 per table of eight

Parking passes available for \$10 – please bring cash to the event. Parking is \$15 without pass

Online Registration*: <https://www.eventbrite.com/e/ieee-pes-boston-chapters-2025-annual-banquet-tickets-1325863997909>

**A small convenience fee will apply to online ticket transactions.

Checks are also acceptable. Please make the check payable to **IEEE PES Boston Chapter** and mail it to:
Jack Martin, IEEE PES Boston Treasurer
50 Church Street, Westwood, MA 02090

Registration Closing Date and Time: 3PM on Tuesday, May 6, 2025

Sponsorship opportunities available. Send inquiries to Amsa.Mangga@Eversource.com

Visit IEEE PES Boston Chapter's website for details!
<https://site.ieee.org/boston-pes/>

IEEE Boston Reliability Chapter – 5:00 PM, Wednesday, May 14

Introduction to Electronic Reliability in the Age of AI

Location - This Meeting is to be delivered in-person at MIT Lincoln Lab Main Cafeteria, 244 Wood St, Lexington, MA 02421, and virtually. If attending in person, you must show a valid photo ID at the gate.

Speaker: Joh Kordell, Ph.D.

Event Registration Link: <https://events.vtools.ieee.org/m/483183>

Doors open at 5pm, with food and refreshments served at 5:30.

Electronics play a crucial role across all industry sectors, especially as systems become more interconnected, cloud-based, electrified, and powered by artificial intelligence (AI). This applies not only to existing electronics but also to emerging technologies pushing the boundaries of scale, data speed, power, and AI-driven innovations. Emerging technologies that are major drivers for electronics growth include Hyperscalars driven by AI and machine learning, IOT, EV and autonomous vehicles.

Generative AI has been driving demand for high performance GPU based servers and increased loads at data centers. Chip makers have in turn been focused on development of MPUs and GPUs optimized for AI. 5 and 6G applications likewise require sensing, computation and transfer of large volumes of data without latency. All these applications have been pushing electronics towards heterogenous integration with 2.5 and 3D chiplets which allow for greater speeds, functionality and smaller footprints.

However, these newer designs, materials and shrinking of scale cause thermal management and reliability issues in electronics introducing new failure sites and modes.

This seminar will focus on the critical role reliability plays in the design, manufacturing, and long-term performance of electronic systems. The presentation will start with an overview of the semiconductor sup-

ply chain, answering questions such as “who are the key players in various industries?” and “what is driving innovation and how is it taking shape?” The session will continue with addressing key foundational electronics reliability concepts such as the bathtub curve, the difference between reliability physics and hand-book calculations, prognostic health management,



Jon Kordell, PhD

and common failure mechanisms. Additional time will be spent describing the reliability challenges presented by advanced packaging, like 3D heterogeneous integrated packages.

To address the evolving topic of electronics reliability as industry needs evolve, Ansys, in collaboration with IEEE, is hosting an Electronics reliability tutorial series that explore electronic component reliability, key electronic failure mechanism and root cause, manufacturing reliability, and simulation/testing for reliability. These tutorials are offered as bundles for continuing education credit with an electronics reliability certificate from IEEE.

Dr. Jonathan Kordell is a Senior Reliability Engineer at Ansys with nearly a decade of experience in electronic packaging reliability, accelerated testing and failure analysis. In his current role, he focuses on ensuring the reliability of electronic devices across various environments, utilizing a blend of physical characterization and advanced analytical modeling techniques, including finite element analysis. Dr. Kordell has tackled a diverse array of

reliability challenges, supporting clients across industries such as Consumer Electronics, Aerospace, Defense, Industrial, and Medical. He earned his PhD in Mechanical Engineering from the University of Maryland's Center for Advanced Life Cycle Engineering (CALCE). There he designed and fabricated fiber optic sensors to track fatigue precursors in mechanically loaded metals and fiber composites.



2025 IEEE International Conference on *Artificial Intelligence & Data Analytics* JUNE 24, 2025

The Joyce Cummings Center
Tufts University Medford Massachusetts

Explore new research & break-throughs in AI; gain valuable insights; network; and get inspired by the brightest minds working in this multi-faceted field!
Space is limited! Sponsorships available!



KEYNOTE SPEAKERS



Matthias Scheutz
Professor, Tufts University School of Engineering



Sadid Hasan
AI Lead at Microsoft



Mark Maybury
VP Commercialization, Technology & Strategic Innovation at Lockheed Martin

REGISTER HERE:



IEEE-ICAD.ORG



Sensors in Spotlight

Northeastern University – Interdisciplinary Science and Engineering Complex (ISEC)
Boston Massachusetts || May 16, 2025

KEYNOTE SPEAKERS

Industry Leaders take the Sensors in Spotlight stage to present BIG VISIONS. This is a unique one-day networking event introducing emerging applications that will inspire technological developments in years to come. Sensors in Spotlight is where sensor technologies take the central stage. The program includes keynote presentations, panel discussions, poster and live demo session, and plenty of networking opportunities. The event will inform and inspire creation of a technological eco-system in support of BIG VISIONS. Sensors in Spotlight is the industry-facing annual conference sponsored by the IEEE Sensors Council.

BRAIN & BODY



Adding Wisdom to Smart Systems
Timothy Denison,
Oxford University



Functional Fabrics Enable Revolutionary Applications: From Color Changing Apparel to Clothing That Can See, Hear, Sense, and Communicate
Alexander (Sasha) Stolyarov,
Advanced Functional Fabrics of America (AFFOA)

SEMICONDUCTORS & SUSTAINABILITY



Materials Challenges to Meet Design Rules for Next-Generation Semiconductors for Sensors and Chip Packages
Drew Chambers,
DuPont Electronics & Industrial



Funding the Future of Sensors
Paul Pickering,
Silicon Catalyst

SPACE & SKY



The Paradox of Safety: How 100 Years of Innovation Can Still Fail Pilots
Steve Smith,
Blue Origin



If you are interested in being a Patron or Exhibitor at Sensors in Spotlight 2025 please visit 2025.ieee-sensorsinspotlight.org for more information.



IEEE MTT/APS JOINT CHAPTER PRESENTS



CAPABILITIES OF A VECTOR NETWORK ANALYZER

SPEAKER

Rick Hollowell

Copper Mountain Technologies
Indianapolis, USA

REGISTER NOW

[\(CLICK HERE\)](#)

- Learn how Vector Network Analyzers deliver precise S-parameter measurements for RF components. Applications in RF and Microwave Engineering.
- Join Rick Hollowell, a 40+ year industry expert, as he explores cutting-edge advancements in VNA technology.
- Learn how to use a VNA with a practical hands-on session.
- A live Q&A Session where you will have a chance to interact with Rick Hollowell and get your questions answered.



MONDAY
19/05/25



05 PM - 07 PM EST



WENTWORTH INSTITUTE OF TECHNOLOGY
550 HUNTINGTON AVE BOSTON, MA 02115
BEATTY HALL 426



55 ANNUNCIATION ROAD, BOSTON
ANNEX LOT

Contact Us For Details



2548780279



kulkarnij@wit.edu



2025 IEEE International Conference on Artificial Intelligence & Data Analytics

June 24, 2025

Tufts Engineering Graduate Programs, Medford, MA

2025 ICAD SPONSORSHIP OPPORTUNITIES

This new conference and exhibition will emphasize the applications of AI and key AI verticals that impact technology applications and innovations. The conference aims to provide an experience that prepares you to learn about new research and breakthroughs in AI, gain valuable insights, grow your network, and get inspired by the brightest minds working in this multi-faceted field.

We are inviting sponsorship from industries, businesses, and government agencies and various levels of sponsorship are possible. Based on the sponsorship level, the sponsor will have access to opportunities for advertising and/or displaying their products, making presentations and a number of free registrations to the conference. We can also customize opportunities like branded merchandise or student awards.

Benefit	Gold Sponsor	Silver Sponsor	Bronze Sponsor	Exhibitor
Investment	\$4000	\$2000	\$1000	\$500
Recognition on Website	X	X	X	X
Logo on Prominent Signage	X	X	X	X
Recognition at Lunch & Breaks	X	X	X	
Logo on Presentation Screen During Breaks	X	X	X	
Ad in Conference Program	1/2 Page	1/4 Page	Logo Only	
Complimentary Conference Registration	Four (4)	Two (2)	One (1)	
Table Top Exhibit Space	X	X		X



Boston Section



Sponsorship Guidelines

For all sponsorship levels, the sponsors' logos will be prominently displayed at all conference events, on the conference web site, as well as in any conference materials. Sponsorships at the Bronze level and above include one or more complimentary registrations for sponsor representatives, depending on the level of sponsorship. If you'd like to sponsor or have questions, contact Trina Lorigan: t.lorigan@ieee.org.



IEEE Boston Aerospace and Electronic Systems Society – 6:00 - 9:00PM, Tuesday, May 20

Rare Earth Element-Based Magnets: Science, Supply and Sustainability in the 21st Century

Location - Northeastern University Innovation Campus at Burlington, MA. 147 South Bedford St., Burlington, MA 01803 (building 5)

Speaker: Prof. Vincent G. Harris, Northeastern University, Department of Electrical and Computer Engineering and Department of Chemical Engineering

Event Registration Link: <https://events.vtools.ieee.org/m/482348>

Rare earth elements (REEs) and their supply chain have become topics of great interest to the U.S. diplomatic and national security communities. Presently, China dominates REE markets in all facets of processing from earth extraction to metals as well as value and commercialization verticals. Beijing has shown

no hesitancy in using its position of market dominance to advance its broader political goals and agendas.

In this presentation, we focus on REE-based magnets and associated challenges faced in 2025. We explore REE science and applications, supply and policy, and sustainability and environ-



Professor Vince Harris

mental impact. We examine what the future holds in terms of alternative sources, recycling, and the practice of designing components around REEs.

Finally, we report on what steps can be taken by the global community to offset China's monopoly on rare earths.

Prof. Vince Harris is University Distinguished Professor & W. L. Smith Chair Professor, in the Departments of Electrical and Computer Engineering and Chemical Engineering, at Northeastern University. His expertise in science and technology encompasses a wide range of advanced multifunctional materials and novel electronic components. He has made lasting contributions most notably in the field of magnetoceramics, RF device physics, and the commercialization of novel RF devices and systems. In 2025, Harris was ranked by SCHOLARGPS as the #1 global scholar of more than 28,000 scientists active in research in magnetoceramics since 1970. His achievements in scholarship have led to his elevation to Fellow of multiple professional societies such as the American Association for the Advancement of Science (AAAS), American Physical Society (APS), Institute of Electrical and Electronic Engineers (IEEE), National Academy of Inventors (NAI), and Artificial Intelligence Industrial Alliance (AIIA), among other societies of distinction.

During his professional career Prof. Harris has assumed a multiplicity of roles including engineer & physicist; innovator & inventor; defense scientist & NRL branch chief; mentor & educator; entrepreneur & CEO; policy expert & analyst, and most recently, Director of the Kostas Research Institute.

In areas of policy, he has served as a Fulbright Scholar, Jefferson Science Fellow (JSF) at the U.S. State Department where he continues to serve, and as a Foreign Expert Fellow of the Chinese State Administration of Foreign Expert Affairs. In his role as JSF at State, he served on State's China Network and managed a portfolio that included critical materials and supply chain dynamics as well as investigating the role of China's Belt and Road Initiative and its impact upon international commerce and geopolitical stability. In this capacity, he served on President Biden's National Security Council and advised Secretary Blinken on matters of China's long-term influence upon climate change, critical materials supply, and U.S. national security.

IEEE Boston Consultants Network – 7:00PM, Wednesday, May 28

CNET Presentation to the IEEE Medical Device Group

Location - Zoom

Speakers: David Connor, Larry Nelson Sr., and Mark Fitzgerald from CNET

Event Registration Link: <https://www.mdgboston.org/event/achieving-maximum-benefit-from-consultants/>

After registering, you will receive a confirmation email containing information about joining the webinar.

Three highly experienced consultants and CNET members: David Connor, Larry Nelson Sr., and Mark Fitzgerald, will talk about the rationale and the benefits of hiring consultants and the basic facts of being a consultant with emphasis on medical devices' regulatory requirements.

This multi-part presentation about consulting will be

from 3 distinct points of view:

1. Medical Device applications of where consultants add value
2. Hiring a consultant – adding value to your project
3. Become a consultant – consulting as a career

IEEE Boston Consultants Network (CNET) is a consultants' group that offers a wide variety of consulting services in electrical, hardware, software, IT, regulatory, technical writing, and many other engineering disciplines.

[bostonconsultants.org](https://www.bostonconsultants.org)

LinkedIn:
IEEE Boston Consultants
Network



*IEEE International Conference on
Artificial Intelligence and Data Analytics*

2025 ICAD
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Exhibit Space Available for \$500!

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IEEE Foundation – 12:00PM, Tuesday, June 10

IEEE Foundation Estate Planning Luncheon

Location - Cafe Escadrille, Grand Courtyard Room,
26 Cambridge Street, Burlington, MA 01803

Speakers: Joblin C. Younger, Esq., LL.M

Event Registration Link: <https://www.mdgboston.org/event/achieving-maximum-benefit-from-consultants/>

This exclusive event is hosted by the IEEE Foundation director Dr. Karen Panetta and seating is limited.

The luncheon will include an insightful introduction to the IEEE Foundation, the heart of IEEE philanthropy, and its distinguished IEEE Goldsmith Legacy League.

We are pleased to have expert speaker attorney Joblin C. Younger, Esq., LL.M., Law Office of Joblin C. Younger, P.C. Attorney Joblin C. Younger assists individuals, families, and small businesses with estate planning, probate, corporate, real estate, and taxation needs. He has extensive experience managing trusts and estates, from simple wills and trusts to more complex tax and corporate matters. Attorney Younger represents and advises fiduciaries, beneficiaries, and business professionals, always prioritizing his clients' best interests.

We look forward to seeing you there!

The banner features a background image of hands holding a small house model. On the right, a circular portrait of Joblin C. Younger, Esq., LL.M., is shown. The IEEE Foundation logo is in the top left, and the IEEE logo is in the top right. The event title 'Estate Planning Luncheon' is prominently displayed in the center-left. Below the title, it says 'Hosted by IEEE Foundation Director Karen Panetta'. At the bottom, the date '10 JUNE 2025', time '12:00 P.M. ET – 1:30 P.M. ET', and location 'BURLINGTON, MA' are listed, followed by a yellow 'REGISTER NOW' button.

IEEE Foundation

EVENT

Estate Planning Luncheon

Hosted by IEEE Foundation
Director Karen Panetta

Joblin C. Younger, Esq., LL.M.
LAW OFFICE OF JOBLIN C. YOUNGER, P.C.

10 JUNE 2025 12:00 P.M. ET – 1:30 P.M. ET BURLINGTON, MA

REGISTER NOW

Python Applications for Digital Design and Signal Processing

Dates & Times: Course Kick-off/Orientation, 6 - 6:30PM ET, Thursday, May 1
 Live Workshops: 9:00 - 9:30AM ET; Thursdays, May 8, 15, 22 and 29
 First Video Release, Thursday, May 1, 2025, additional videos released weekly in advance of that week's live session!

Speaker: Dan Boschen
Location: Zoom

This is a hands-on course combining pre-recorded lectures with live Q&A and workshop sessions in the popular and powerful open-source Python programming language.

Course Information will be distributed on Thursday, May 1 in advance of and in preparation for the first live workshop session. A live orientation session will be held on February 29. Attendees will have access to the recorded session and exercises for two months (until May 20, 2025) after the last live session ends!

Pre-Recorded Videos: The course format includes pre-recorded video lectures that students can watch on their own schedule, and an unlimited number of times, prior to live Q&A workshop sessions on Zoom with the instructor. The videos will also be available to the students for viewing for up to two months after the conclusion of the course.

Overview: Dan provides simple, straight-forward navigation through the multiple configurations and options, providing a best-practices approach for quickly getting up to speed using Python for modelling and analysis for applications in signal processing and digital design verification. Students will be using the Anaconda distribution, which combines Python with the most popular data science applications, and Jupyter Notebooks for a rich, interactive experience.

The course begins with basic Python data structures and constructs, including key "Pythonic" concepts, followed by an overview and use of popular packages for scientific computing enabling rapid prototyping for system design.

During the course students will create example designs including a sigma delta converter and direct digital synthesizer both in floating point and fixed point. This will include considerations for cycle and bit accurate models useful for digital design verification (FPGA/ASIC), while bringing forward the signal processing tools for frequency and time domain analysis.

Jupyter Notebooks: This course makes extensive use of Jupyter Notebooks which combines running Python code with interactive plots and graphics for a rich user experience. Jupyter Notebooks is an open-source web-based application (that can be run locally) that allows users to create and share visually appealing documents containing code, graphics, visualizations and interactive plots. Students will be able to interact with the notebook contents and use "take-it-with-you" results for future applications in signal processing.

Target Audience: This course is targeted toward users with little to no prior experience in Python, however familiarity with other modern programming languages and an exposure to object-oriented constructs is very helpful. Students should be comfortable with basic signal processing concepts in the frequency and time domain. Familiarity with Matlab or Octave is not required, but the equivalent operations in Python using the NumPy package will be provided for those students that do currently use Matlab and/or Octave for signal processing applications.

Benefits of Attending / Goals of Course: Attendees will gain an overall appreciation of using Python and quickly get up to speed in best practice use of Python.

Topics / Schedule:

Pre-recorded lectures (3 hours each) will be distributed Friday prior to each week's workshop dates. Workshop/ Q&A Sessions are 6 - 7:30PM on the dates listed below:

Kick-off / Orientation: May 1

Class 1 May 8

Topic 1: Intro to Jupyter Notebooks, the Spyder IDE and the course design examples. Core Python constructs.

Class 2 May 15

Topic 2: Core Python constructs; iterators, functions, reading writing data files.

Class 3 May 22

Topic 3: Signal processing simulation with popular packages including NumPy, SciPy, and Matplotlib.

Class 4 May 29

Topic 4: Bit/cycle accurate modelling and analysis using the design examples and simulation packages

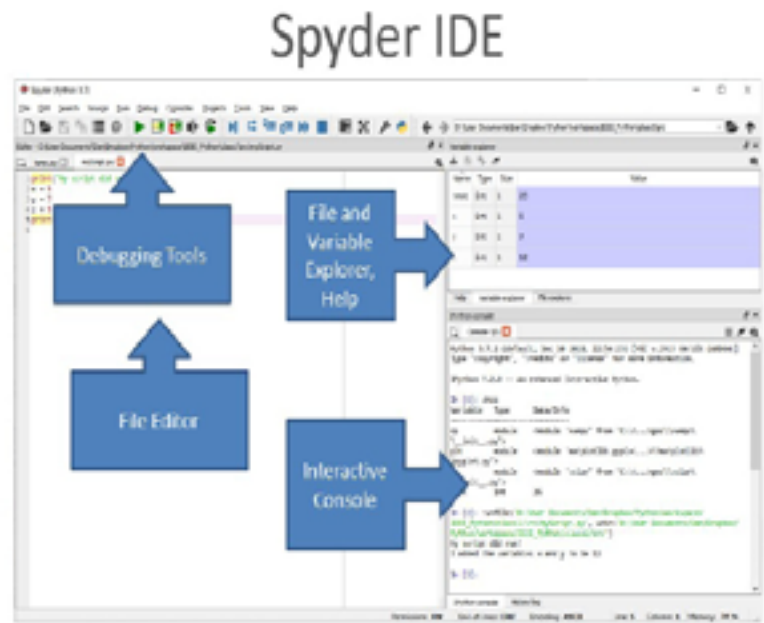
Speaker's Bio: Dan Boschen has a MS in Communications and Signal Processing from Northeastern University, with over 25 years of experience in system and hardware design for radio transceivers and modems. He has held various positions at Signal Technologies, MITRE, Airvana and Hittite Microwave designing and developing transceiver hardware from baseband to antenna for wireless communications systems and has taught courses on DSP to international audiences for over 15 years. Dan is a contributor to Signal Processing Stack Exchange <https://dsp.stackexchange.com/>, and is currently at Microchip (formerly Microsemi and Symmetricom) leading design efforts for advanced frequency and time solutions.

For more background information, please view Dan's Linked-In page (<https://www.linkedin.com/in/danboschen/>)

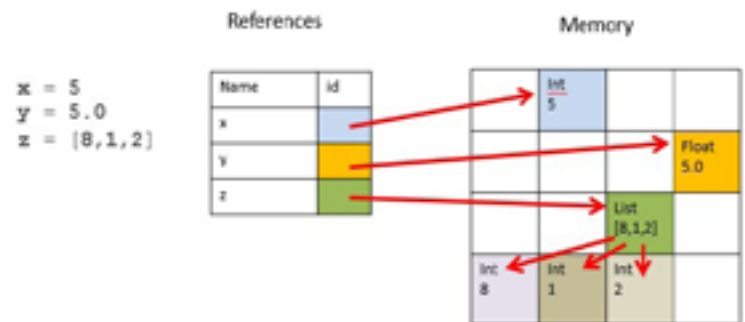
Registration is open through the last live workshop date. Live workshops are recorded for later use.

Decision (Run/Cancel) Date for this Course is Thursday, April 24, 2025

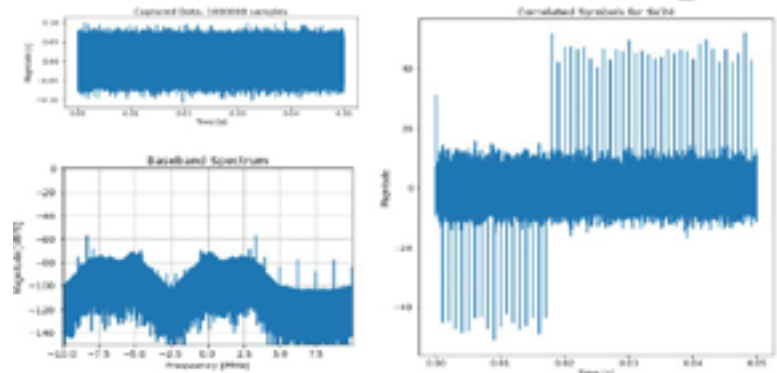
Payment On/by	May 8	After May 8
IEEE Members	\$190	\$285
Non-members	\$210	\$315



Mutable / Immutable



GPS Waveform Processing



DSP for Wireless Communications

Dates & Times: Course Kick-off/Orientation, 6 - 6:30PM ET, Thursday, July 3
 Live Workshops: 6:00 - 7:30PM ET; Thursdays, July 10, 17, 24, 31 & Aug. 7
 First Video Release, Thursday, July 3, 2025 additional videos released weekly in advance of that week's live session!

Speaker: Dan Boschen
Location: Zoom

New Format Combining Live Workshops with Pre-recorded Video - This is a hands-on course providing pre-recorded lectures that students can watch **on their own schedule** and an **unlimited number of times** prior to live Q&A/Workshop sessions with the instructor. Ten 1.5 hour videos released 2 per week while the course is in session will be available for up to two months after the conclusion of the course...until July 23, 2024

Course Summary

This course is a fresh view of the fundamental and practical concepts of digital signal processing applicable to the design of mixed signal design with A/D conversion, digital filters, operations with the FFT, and multi-rate signal processing. This course will build an intuitive understanding of the underlying mathematics through the use of graphics, visual demonstrations, and applications in GPS and mixed signal (analog/digital) modern transceivers. This course is applicable to DSP algorithm development with a focus on meeting practical hardware development challenges in both the analog and digital domains, and not a tutorial on working with specific DSP processor hardware.

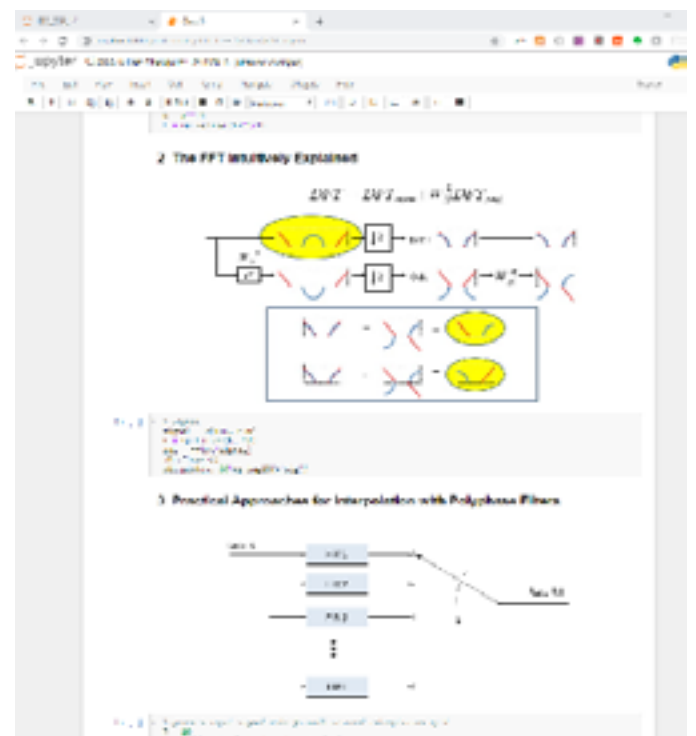
Now with Jupyter Notebooks!

This long-running IEEE Course has been updated to include Jupyter Notebooks which incorporates graphics together with Python simulation code to provide a "take-it-with-you" interactive user experience. No knowledge of Python is required but the notebooks will provide a basic framework for proceeding with further signal processing development using that tools for those that have interest in doing so.

This course will not be teaching Python, but using it for demonstration. A more detailed course on Python itself

is covered in a separate IEEE Course "Python Applications for Digital Design and Signal Processing".

Students will be encouraged but not required to load all the Python tools needed, and all set-up information for installation will be provided prior to the start of class.



Target Audience:

All engineers involved in or interested in signal processing applications. Engineers with significant experience with DSP will also appreciate this opportunity for an in-depth review of the fundamental DSP concepts from a different perspective than that given in a traditional introductory DSP course.

Benefits of Attending/ Goals of Course:

Attendees will build a stronger intuitive understanding of the fundamental signal processing concepts involved with digital filtering and mixed signal analog and digital design. With this, attendees will be able to implement more creative and efficient signal processing architectures in both the analog and digital domains. The knowledge gained from this course will have immediate practical value for any work in the signal processing field.

Topics / Schedule:

Class 1: Correlation, Fourier Transform, Laplace Transform

Class 2: Sampling and A/D Conversion, Z –transform, D/A Conversion

Class 3: IIR and FIR Digital filters, Direct Fourier Transform

Class 4: Windowing, Digital Filter Design, Fixed Point vs Floating Point

Class 5: Fast Fourier Transform, Multi-rate Signal Processing, Multi-rate Filters

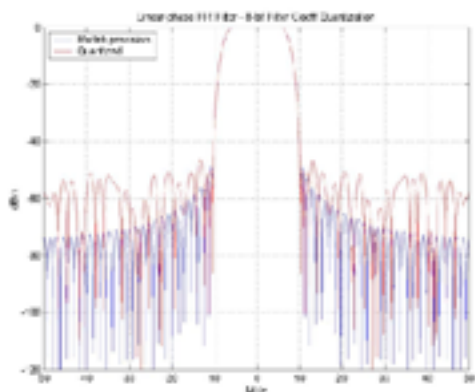
Speaker's Bio:

Dan Boschen has a MS in Communications and Signal Processing from Northeastern University, with over 25 years of experience in system and hardware design for radio transceivers and modems. He has held various positions at Signal Technologies, MITRE, Airvana and Hittite Microwave designing and developing transceiver hardware from baseband to antenna for wireless communications systems. Dan is currently at Microchip (formerly Microsemi and Symmetricom) leading design efforts for advanced frequency and time solutions.

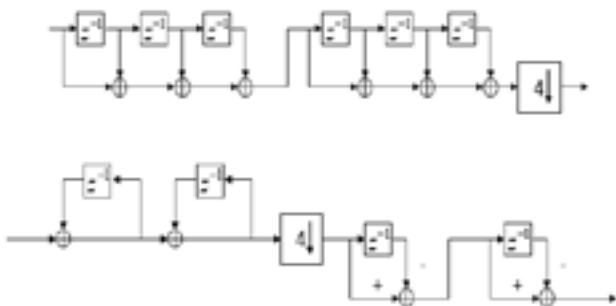
For more background information, please view Dan's Linked-In page at:

<http://www.linkedin.com/in/danboschen>

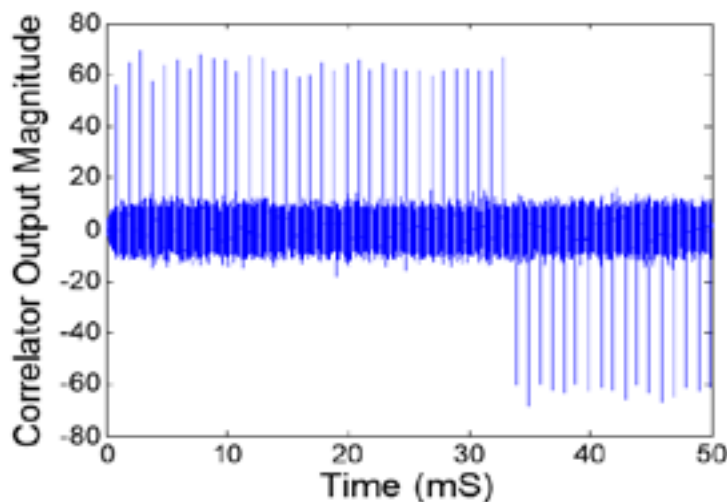
Linear Phase FIR Filter
(8-bit quantized filter coefficients)



Multi-stage CIC



Sliding Correlation



Decision (Run/Cancel) Date for this Course is Friday, June 27, 2025

Payment	By June 19	After June 19
IEEE Members	\$190	\$285
Non-members	\$210	\$315

Digital Signal Processing (DSP) for Software Radio

Dates & Times: Live Workshops: 6 - 7:30PM EST; Thursdays, October 23, November 6, 13, 20, December 4 and 11; First Video Release and Orientation, 6 - 6:30PM October 23, 2025. Additional videos released weekly in advance of that week's live session!

Speaker: Dan Boschen

Location: Zoom

Attendees will have access to the recorded session and exercises for two months (until February 11, 2026) after the last live session ends!

This is a hands-on course providing pre-recorded lectures that students can watch on their own schedule and an unlimited number of times prior to live Q&A/Workshop sessions with the instructor. Ten 1.5 hour videos released 2 per week while the course is in session will be available for up to two months after the conclusion of the course.

Course Summary This course builds on the IEEE course "DSP for Wireless Communications" also taught by Dan Boschen, further detailing digital signal processing most applicable to practical real-world problems and applications in radio communication systems. Students need not have taken the prior course if they are familiar with fundamental DSP concepts such as the Laplace and Z transform and basic digital filter design principles.

This course brings together core DSP concepts to address signal processing challenges encountered in radios and modems for modern wireless communications. Specific areas covered include carrier and timing recovery, equalization, automatic gain control, and considerations to mitigate the effects of RF and channel distortions such as multipath, phase noise and amplitude/phase offsets.

Dan builds an intuitive understanding of the underlying mathematics through the use of graphics, visual

demonstrations, and real-world applications for mixed signal (analog/digital) modern transceivers. This course is applicable to DSP algorithm development with a focus on meeting practical hardware development challenges, rather than a tutorial on implementations with DSP processors.

Now with Jupyter Notebooks! This long-running IEEE Course has been updated to include Jupyter Notebooks which incorporates graphics together with Python simulation code to provide a "take-it-with-you" interactive user experience. No knowledge of Python is required but the notebooks will provide a basic framework for proceeding with further signal processing development using that tools for those that have interest in doing so.

This course will not be teaching Python, but using it for demonstration. A more detailed course on Python itself is covered in a separate IEEE Course routinely taught by Dan titled "Python Applications for Digital Design and Signal Processing".

All set-up information for installation of all tools used will be provided prior to the start of class.

Target Audience: All engineers involved in or interested in signal processing for wireless communications. Students should have either taken the earlier course "DSP for Wireless Communications" or have been sufficiently exposed to basic signal processing concepts such as Fourier, Laplace, and Z-transforms, Digital filter (FIR/IIR) structures, and representation of complex

digital and analog signals in the time and frequency domains. Please contact Dan at boschen@loglin.com if you are uncertain about your background or if you would like more information on the course.

For more background information, please view Dan's Linked-In page at: <http://www.linkedin.com/in/dan-boschen>

Benefits of Attending/ Goals of Course:

Attendees will gain a strong intuitive understanding of the practical and common signal processing implementations found in modern radio and modem architectures and be able to apply these concepts directly to communications system design.

Topics / Schedule:

Class 1: DSP Review, Radio Architectures, Digital Mapping, Pulse Shaping, Eye Diagrams

Class 2: ADC Receiver, CORDIC Rotator, Digital Down Converters, Numerically Controlled Oscillators

Class 3: Digital Control Loops; Output Power Control, Automatic Gain Control

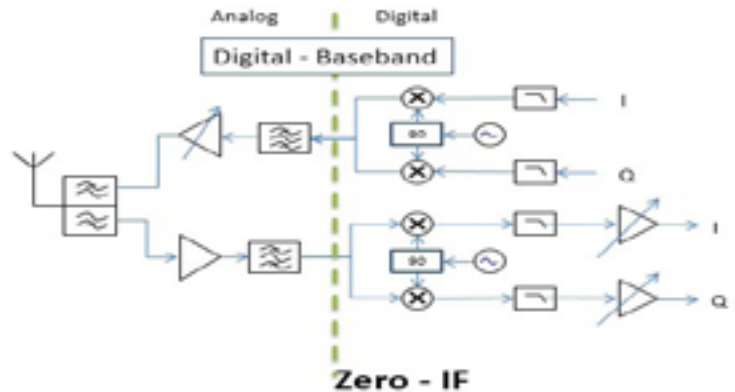
Class 4: Digital Control Loops; Carrier and Timing Recovery, Sigma Delta Converters

Class 5: RF Signal Impairments, Equalization and Compensation, Linear Feedback Shift Registers

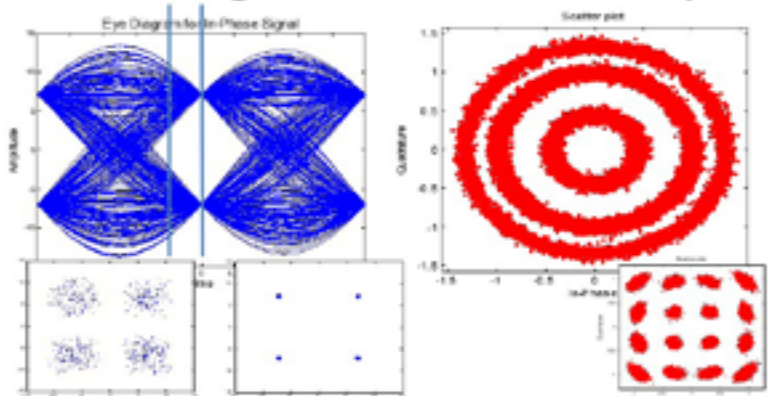
Speaker's Bio:

Dan Boschen has a MS in Communications and Signal Processing from Northeastern University, with over 25 years of experience in system and hardware design for radio transceivers and modems. He has held various positions at Signal Technologies, MITRE, Airvana and Hittite Microwave designing and developing transceiver hardware from baseband to antenna for wireless communications systems and has taught courses on DSP to international audiences for over 15 years. Dan is a contributor to Signal Processing Stack Exchange <https://dsp.stackexchange.com/>, and is currently at Microchip (formerly Microsemi and Symmetricom) leading design efforts for advanced frequency and time solutions.

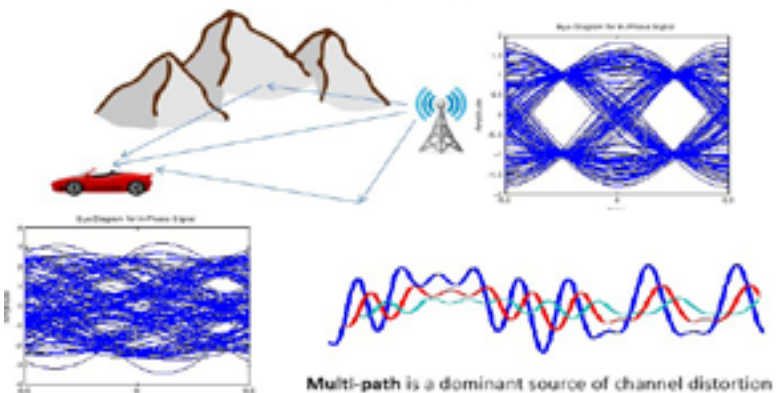
Radio Architectures



Timing and Carrier Recovery



Channel Distortion



Decision (Run/Cancel) Date for this Course is Friday, October 17, 2025

Payment	By Oct 17	After Oct 17
IEEE Members	\$190	\$285
Non-members	\$210	\$315

<https://ieeeboston.org/courses>

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- Fundamentals of Real-Time Operating Systems

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Boston Section

IEEE Strategic Plan

2025-2030

OUR MISSION

We foster technological innovation and excellence for the benefit of humanity.

OUR VISION

We will be essential to the global technical community and to technical professionals everywhere, and be universally recognized for the contributions of technology and of technical professionals in improving global conditions.

CORE VALUES



Growth & Nurturing



Trust



Partnership



Integrity in Action



Global Community Building



Service to Humanity

OUR GOALS

Advance science and technology as a leading trusted source of information for research, development, standards, and public policy

Provide opportunities for technology-related interdisciplinary collaboration, research, and knowledge sharing across industry, academia, and government

Expand public awareness of the significant role that engineering, science, and technology play across the globe

Drive technological innovation while promoting scientific integrity and the ethical development and use of technology

Inspire intellectual curiosity and support discovery and invention to engage the next generation of technology innovators

Empower technology professionals in their careers through ongoing education, mentoring, networking, and lifelong engagement

IEEE will foster a collaborative environment that is open, inclusive, and free of bias and will continue to sustain the strength, reach, and vitality of our organization for future generations.

www.ieee.org/strategic-plan

Approved by the IEEE Board of Directors, November 2024



IEEE Boston Section Volunteers Wanted!

Are you passionate about technology and eager to contribute to the advancement of your field? The IEEE Boston Section is excited to announce a call for volunteers to join our dynamic team of professionals and enthusiasts. By becoming a volunteer, you'll have the opportunity to collaborate with like-minded individuals, develop new skills, and make a meaningful impact on the local technology community.

About IEEE Boston Section:

The IEEE Boston Section is a thriving community of engineers, researchers, students, and industry professionals dedicated to promoting technological innovation and knowledge sharing. Our section hosts a variety of events, workshops, seminars, and conferences throughout the year, providing members with opportunities to learn, network, and stay updated on the latest developments in their fields.

Volunteer Opportunities:

We are currently seeking volunteers to help on the following committees:

The Fellow and Awards Committee - activities include recommending qualified members of the Section for advancement to Fellow grade and for receipt of the various IEEE (IEEE/Region/MGA/Section) awards. Identifying and building a database of the various IEEE awards available for nomination and searching out qualified candidates, for preparing the necessary written recommendations, and for assembling all required supporting documentation and submit its recommendations directly to the appropriate IEEE body.

Time Commitment: Meets 4 times a year for 1 – 2 hours per meeting (virtual or in person)

Local Conferences Committee - activities include identifying timely topical areas for conference development. Identify champions of these conferences to run the identified conference organizing committees. The section local conference committee is not charged with organizing and executing individual conferences.

Time Commitment: Meets 4 times per year 1 – 2 hours per meeting (virtual or in person)

Professional Development & Education Committee - activities include identifying topics, speakers, and/or organizers for appropriate technical lecture series or seminars. The subject matter should be timely, of interest to a large segment of the membership, and well organized with regard to speakers and written subject matter.

Time Commitment: meets 4 times per year, 1 – 2 hours per meeting (virtual or in person)

The Membership Development Committee - activities include actively promoting membership in the IEEE and shall encourage members to advance to the highest grade of membership for which they are qualified. To these ends this committee shall include wide

representation within the Section territory, shall maintain lists of prospects and members qualified for advancement, and shall provide information and assistance to preparing applications.

Time Commitment: meets 4 times per year, 1 – 2 hours per meeting (virtual or in person)

Student Activities Committee - activities include attracting a broad and diverse group of undergraduate and graduate students to IEEE and to engage them in activities that promote their own professional development as well as the ongoing growth of IEEE. The Student Activities Committee shall include among its members the IEEE Counselors at the universities, colleges, and technical institutes that lie within the Section territory. It shall be responsible for liaison with the Student Branches at these institutions and advise the Executive Committee on all other matters affecting the Student Members of the Section.

Time Commitment: meets 4 times per year, 1 – 2 hours per meeting (virtual or in person)

Young Professionals Affinity Group - activities include organizing programs, and initiatives aimed to address the needs of early-career professionals pursuing technology-related careers in engineering, business, management, marketing, and law. This committee is committed to helping young professionals evaluate their career goals, polish their professional image, and create the building blocks of a lifelong and diverse professional network.

Time Commitment: meets 4 times per year, 1 – 2 hours per meeting (virtual or in person)

Benefits of Volunteering:

Volunteering with IEEE Boston Section offers numerous benefits, including:

- Networking opportunities with professionals in your field.
- Skill development and enhancement through hands-on experience.
- Contribution to the local technology community and its growth.
- Access to cutting-edge information and discussions.

How to Get Involved:

If you're enthusiastic about technology and want to make a difference, we invite you to join us as a volunteer. To express your interest and learn more about specific roles, please visit our website and fill out the volunteer application form. Our team will get in touch with you to discuss opportunities that align with your interests and skills.

Thank you for considering this opportunity to contribute to the IEEE Boston Section. Your dedication and passion are what drive the success of our community and its impact on the world of technology.

[Volunteer Here!](#)

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