Pittsburgh Section

Bulletin

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• *Chair's Corner*

Welcome to the March Edition of the Pittsburgh Bulletin.

Spring is just around the corner and we have some amazing events coming up, including a technical symposium in April and many meetings amongst our groups. As the weather starts getting warmer, we typically start seeing more events happen. For a quick glance of what is coming up, the last page of the bulletin has a calendar of events. We'd love for more people to come out and learn more about volunteering with the IEEE Pittsburgh Section.

These last few weeks have been trying for some of the section members. A number of layoffs have hit the Pittsburgh region, including tech sector, government sector, and healthcare sector. IEEE has some resources that can be helpful with regard to involuntary career transitions. The first is with IEEE-USA. Their career site ([Help for the Unemployed or At-Risk Member | IEEE-USA](#)) has many resources for creating employment networks [Employment Networks](#)) and strategies for the job search ([Job Search Webinars](#)). Greater IEEE also has a job board that posts regularly ([IEEE Jobs](#)).

Outside of IEEE, there are many job boards and information about how to handle a job transition. While applying for jobs, remember to try and keep a routine. Make sure there is at least one task a day that you can complete to stay sane. Reach out to people that may have jobs in their network. It might be a longer haul to find a job, but try to find the little positives in life.

Jenna Price
2025 Pittsburgh Chair

jprice@ieee.org

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Chair - Jenna Price, jprice@ieee.org

Vice Chair - Greg Price, gprice@ieee.org

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Asst. Treasurer – open

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Education Society- Chair: Ahmed H Dallal, ahd12@pitt.edu

Electronics Packaging/Electron Devices Societies – Chair: John Mazurowski jsm23@arl.psu.edu

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Electromagnetic Compatibility Society - Chair: Mike Oliver

Magnetics Society – Chair: Dr. Simran Singh - simranjs@andrew.cmu.edu

Nanotechnology Society - Chair: Andrew Cochran, acochran@andrew.cmu.edu,

Power Electronics Society – Chair: Patrick Lewis, ptl7@ieee.org

Power & Energy & Industry Applications Societies
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Robotics Society – Chair: Ralph Sprang, rsprang@ieee.org

Signal Processing & Control Systems Societies – Chair: Danson Garcia P.E., dansongarcia@ieee.org; Vice Chair: Jesse Mahn**, jesse.mahn@outlook.com**

Society on Social Implications of Technology
Chair: Dr. James Beck, jebeck@ieee.org; Vice Chair: Joe Kalasky, P.E., j.kalasky@ieee.org 724-244-1609

Council of Electronic Design Automation Chair: Baris Taskin, taskin@coe.drexel.edu

Affinity Groups
Young Professionals (formerly GOLD) – Chair: Jesse Mahn, jesse.mahn@outlook.com

Women In Engineering – Chair: Alexis Gorgacz, agorgacz@ieee.org

Life Members: Joe Kalasky, P.E., j.kalasky@ieee.org

Committees
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Student Activities – Chair: Connor Watson, connor.watson@pitt.edu

Membership Development – Vishal Rastogi, vishal.ras@gmail.com

Publicity – Chair: Thomas Dionise, P.E. ThomasJDionise@eaton.com

- ## *Meetings 101*

Speaker: Greg Price
Date: March 6th, 2025
Time: 6:00 – 7:00 PM (EDT)
Place: Virtual
Registration: https://events.vtools.ieee.org/m/467214
Organizer: Pittsburgh Section

Abstract: With the new year come a lot of changes to leadership within IEEE sections. Because of this, there are often many new members who might be unaware of the nuances of how to do things such as run a hybrid meeting. Even experienced excom members might not have had formal training in any of these areas or may even enjoy a refresher.

This meeting is intended to go over the various specifics of how members can do things such as create meetings in vtools and then run them smoothly in a hybrid format during the time of the event.

- ## *Advanced Agile Practices for AI/ML Product Development*

Speaker: Brian Collins
    Senior Technical Program Manager
    Amazon Artificial General Intelligence
Date: Monday, March 10, 2025
Time: 5:00 PM – 6:00 PM (EST)
Place: **Zoom:** https://wvu.zoom.us/j/9188836315

Abstract: Agile methodologies have proven effective in traditional software development, but applying them to AI/ML projects presents unique challenges. This seminar delves into advanced Agile practices tailored to the dynamic and complex nature of AI/ML product development. Participants will learn how to adapt sprint cycles and Kanban approaches to accommodate experimental research, define "done" criteria for AI/ML tasks with inherent uncertainty, manage intricate data dependencies, and ensure continuous delivery despite the iterative nature of model training and evaluation. Through real-world examples and interactive discussions, attendees will gain practical insights into effectively leveraging Agile principles to accelerate AI/ML innovation and achieve high-impact business outcomes.
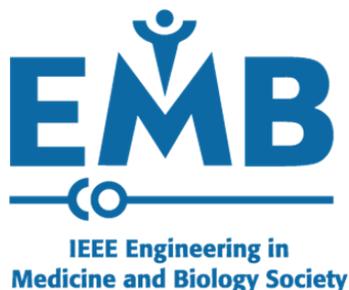
Biography: Brian Collins is a highly accomplished and innovative Technical Program Manager and Product Owner with over 20 years of experience and has delivered cutting-edge AI/ML products. He has a proven track record of leading high-performance Agile teams, driving product vision, and managing complex stakeholder relationships to achieve high-impact business outcomes. Brian's expertise lies in AI/ML product and program management, Agile leadership,

strategic product roadmapping, and advanced data analysis. He has consistently demonstrated his ability to optimize processes and spearhead product strategies that result in groundbreaking user experiences. Brian holds a B.S. in Liberal Arts from The Pennsylvania State University, an M.B.A. from the University of Phoenix, a D.B.A. in Management from Argosy University, and an M.S. in Software Engineering from West Virginia University. Throughout his career, Brian has worked with leading organizations such as Amazon Artificial General Intelligence and UPMC, where he has led and contributed to the development of innovative AI/ML solutions.

- ## *Electrical Engineering Careers in Medical Product Development*

Date: Thursday, March 13, 2025
Time: 6:00 PM (EST)
Location: 157 Benedum Hall
              3700 O'Hara Street
              Pittsburgh, PA 15213
              University of Pittsburgh
Registration: https://events.vtools.ieee.org/m/469826
Food: Pizza and drinks (starting at 6:00 PM; talk at 6:15 PM)
Speaker: Steve Mozelewski, PE, PMP
Organizers: IEEE Engineering in Medicine and Biology Society (EMBS) – Pittsburgh Chapter
              University of Pittsburgh Student Chapter of IEEE

Abstract: When people talk about their careers, it is often easy to tell others what they do. Sharing why they do what they do can sometimes be a challenge for some people. However, Electrical Engineers who work in medical product development environments can always say why they do what they do. When a new product gets released to the market, the product can be used to improve the lives or well-being of others. Sometimes, the product can even be used to save someone's life. That's a great reason to get involved in developing medical products! No matter how your day, week, month, or year is going, you always know that the products you create can have a major impact on someone's life and that's a great feeling. In this talk, Mr. Mozelewski will discuss careers in medical product development and offer many tips on how Electrical Engineering students can position themselves to take advantage of future job opportunities with medical device companies.

Bio: Steve Mozelewski is a Senior Product Development leader in Philips' Sleep and Respiratory Care division. He has more than 30 years of medical device product development experience and, during much of that time, has hired many other individuals for his employers. He has led large and small teams through the release of a number of medical products and software applications supporting businesses ranging up to $600 M in annual revenue. Mr. Mozelewski has a BS degree in Electrical Engineering from the University of Pittsburgh and an MS degree in Biomedical Engineering from The Ohio State University. He is currently the Chair of the External Advisory Council for the Biomedical Engineering Department at Ohio State and is also on the Visiting Board for the Department of Electrical and Computer Engineering at the Swanson School of Engineering at the University of Pittsburgh. The Immediate Past Chair of the Pittsburgh Section of the IEEE, Mr. Mozelewski has also been the Chair of the Pittsburgh Chapter of the IEEE Engineering in Medicine and Biology Society (EMBS) for the past nine years.

- ### *2025 IEEE Technical Symposium in Western Pennsylvania*

  ### *Call for Posters*

Dear IEEE members,

We are hosting an IEEE Technical Symposium on April 5, 2025. The tentative format for the symposium is shown below. All times are in eastern time zone.

8:00 – 8:30 - Breakfast
8:30 – 9:30 – Session 1 (3 presentations)
9:30 – 10:30 – Keynote
10: 30 am – 10:40 – Break
10:40 – 12:00 – Session 2 (4 presentations)
12:00 – 1:00 - Lunch
1:00 – 2:00 – Session 3 (3 presentations)
2:00 – 3:00 – Keynote 2
3:00 – 3:15 – Break
3:15 – 4:35 – Session 4 (4 presentations)
4:35 – 5:15 – Lightening talks (3-minute talk for each poster)
5:15 – 6:15 - Reception and Posters

The program includes 2 keynotes and 12 presentations.

We are now looking for participants who would like to present a poster about an engineering topic. Interested IEEE members are requested to submit a 150-word Abstract of their poster presentations and a 100-word Speaker's Biography in the following format to Balaji Palanisamy (bpalan@pitt.edu) and Abdulrahman Alhaidari <ABA70@pitt.edu>by March 10th. You may **optionally** include a pdf or pptx file of the poster in your email. Each accepted poster will include a 3-minute lightening talk and an opportunity to present the poster during the reception at the event.

Submit the following:

Speaker's Name:
Title:
Organization:
Abstract: (150 words)
Speaker's Biography: (100 words)

You will be notified by March 16th if you are selected to be one of the poster presenters. Here are the details of this hybrid event:

Place: 3rd Floor Theater space, Information Science Building, 135 N Bellefield Ave, Pittsburgh, PA 15260
Remote option: through Zoom.
Please RSVP using the following link: https://events.vtools.ieee.org/m/471252

The symposium will include the following talks:

Keynote 1: Title: TBD
Speaker: Ragunathan "Raj" Rajkumar – (**Keynote speaker**)
Organization: Department of Electrical and Computer Engineering, Carnegie Mellon University

Keynote 2: How should we measure the digital economy?
Speaker: Avinash (Avi) Collis – (**Keynote speaker**)
Organization: Heinz College of Information Systems and Public Policy at Carnegie Mellon University

Large Teams Overshadow Individual Recognition

Speaker's Name: Lulin Yang
Organization: University of Pittsburgh

Krait: A Backdoor Attack Against Graph Prompt Tuning
Speaker's Name: Ying Song
Organization: DINS, SCI, University of Pittsburgh

Autonomous Vehicle advancements with AI integration and the role of V&V for safe deployment
Speaker's Name: Kartik Srinivasan
Organization: Torc Robotics

Power Flow Control in a Modern Grid with Sen Transformer
Speaker's Name: Kalyan K. Sen, PhD, PE, MBA, IEEE Life Fellow
Title: Fulbright Scholar, IEEE PES Distinguished Lecturer
Organization: President & CTO, Sen Engineering Solutions, Inc.

Course-Skill Atlas: A national longitudinal dataset of skills taught in US higher education curricula

Speaker's Name: Alireza Javadian Sabet
Organization: University of Pittsburgh

PPFL-RDSN: Privacy-Preserving Federated Learning-based Residual Dense Spatial Networks for Encrypted Lossy Image Reconstruction

Speaker's Name: Peilin He
Organization: DINS, University of Pittsburgh

From K-Armed Bandit Problems to Real-Time Strategy Games

Speaker's Name: Dr. Chang Liu, Professor in Computer Science
Organization: Ohio University

Political Elites in the Attention Economy: Visibility Over Civility and Credibility?

Speaker's Name: Ahana Biswas
Organization: University of Pittsburgh

Real-Time Mitigation of Non-Price Flash Loan Attacks in DeFi

Speaker's Name: Abdulrahman Alhaidari
Organization: University of Pittsburgh

Lab Dynamics Behind Paper Retraction

Speaker's Name: Yiling Lin
Organization: University of Pittsburgh, Department of Informatics and Networked Systems

Availability and Cost Analysis of Network-Attack-Resilient Byzantine Fault Tolerant Systems

Speaker's Name: Aren Alyahya
Organization: RSSLab, University of Pittsburgh

Explanations Help: Leveraging Human Capabilities to Detect Cyberattacks on Automated Vehicles

Speaker's Name: Yaohan Ding
Organization: University of Pittsburgh

Mapping Workforce Potential for the CHIPS Act: Skill Similarities, Political Realities, and U.S. Semiconductor Expansion

Speaker's Name: Arezou Farzaneh
Organization: University of Pittsburgh

- **_IEEE Pittsburgh Section Annual History and Awards Dinner_**

Date: Friday, May 16, 2025
Time: 5:00 PM: Arrival
6:00 PM: Dinner and Awards Presentations
7:00 PM: Keynote Speech
Place: Edgewood Country Club
100 Churchill Rd, Pittsburgh, PA 15235.
Phone: 412-823-7300 x12; Email: events@eccgolf.com
Cost: $30 per member; $50 member plus guest (Cash Bar is available); Life Member Affinity group will offer $10 discount to RETIRED IEEE Members.
Organizer: IEEE Pittsburgh Section.
Cosponsor: Life Member Affinity group
RSVP: **Required** by May 5, 2025. Seating is limited to 50 people. Register online at: https://events.vtools.ieee.org/m/467970. Payment can be made by sending a check, payable to "IEEE Pittsburgh Section," to Mey Sen, 126 Pauline Dr., Monroeville, PA 15146. Checks should be posted May 5, 2025. Please provide the name of your guest, if any. For any question, please write to Mey at senml@ieee.org.

WHY NOT NUCLEAR?

Speaker: Joseph T. Cioletti, PE., Principal Engineer, Westinghouse Electric Company

Abstract: Commercial nuclear power has always been a controversial topic in the media, especially since Three Mile Island and Chernobyl. Over the last several decades, changes throughout the industry have provided advancements in safety and operating efficiencies, making nuclear power a safe, economically viable and sound option for our energy future. The purpose of this presentation is to lay out the facts in a reasonable manner that shows a clear-cut case for expansion of nuclear power plants in the U.S.

Biography: Joe is currently a Principal Project Manager with Westinghouse Nuclear Rotating Equipment Services. Previously, Joe was a senior engineering consultant with Westinghouse Nuclear for the Czech Republic's Temelin Nuclear Power Plant I&C Upgrade Program; a Senior Project Manager for Mott McDonald working with the Port Authority light rail and Mon Incline upgrade projects; he consulted Comcast for their power infrastructure planning; did business development for Athena Sciences; performed systems engineering for the SEPTA Positive Train Control program at Hitachi; at Westinghouse; he managed China customer I&C technical issue resolution of both Sanmen and Haiyang AP1000 nuclear plants, the first passively cooled nuclear power plants.

Joe was a catalyst for the successful startup of the high-speed maglev program for the Pittsburgh area, which lost US government support post 9/11, that same system was built and operates at up to 260 MPH between Shanghai, China and its airport. He is an experienced resource manager of over 30 professionals. Earlier in his career, he designed a vehicle borne Operator's Console drop-in LCD unit for its Automatic Train Control System that ran for

decades. His interest in LCD displays led him to do R&D on some of the early TFT LCD display technologies, predecessors of today's displays.

Joe holds BS and MS degrees in EE from the University of Pittsburgh and an MBA (with honors) from Robert Morris University. He is a registered Professional Engineer (PE) in Pennsylvania and holds a PMP project management certification. He is Professional Activities (PA) Committee Chair for IEEE Pittsburgh Section. He is a member of R2 Industry Relations Committee. He has participated in many Congressional Visits Day events sponsored by IEEE-USA.

He holds 5 US Patents, some of which were marketed as motion activated LED safety light to a national bicycling distributor, selling several thousand units and received royalties.

- ### *IEEE Pittsburgh Section Outing to The National Museum of the US Air Force at Wright-Patterson AFB near Dayton, Ohio*

Date: Saturday, May 31, 2025
Time: 6:00 AM: Departure, Panera Bread, Miracle Mile,
                          4172 William Penn Hwy, Monroeville, PA 15146.
                          10:00 PM: Return
Cost: $40 per person
RSVP: **Required at** https://events.vtools.ieee.org/m/456469**. These seats are available on a first-come-first-serve basis. If interested, please send an email to senkk@ieee.org and send your check in the amount of $40 per person, payable to "IEEE Pittsburgh Section" to the following address: Mey Sen, 126 Pauline Drive, Monroeville, PA 15146.**

Organizers: IEEE Pittsburgh Section

We are organizing an outing to *The National Museum of the US Air Force* at Wright-Patterson AFB near Dayton, Ohio**.** The event is open to the IEEE Pittsburgh Section's members and their guests and limited to the capacity (34 people) of the bus on a first-come-first-serve basis. The event is highly subsidized by the Section. If interested, please register at the vtools weblink above.

The museum, which is free to the public, is the world's largest military aviation museum. Here are just a few of the items on view: X-15 rocket plane, U2 and SR-71 spy planes, B-52 B-29 B17 and XB-70 bombers, F-22 F-111 P-51 fighters, Apollo Capsule, Soyuz capsule, as well as the Second Wright Flyer, and ICBMs, cruise missiles, strange prototypes and all of the Presidential Air Force Ones (except Reagan's) etc. All exhibits are located indoors. The museum features more than 350 aerospace vehicles and missiles and thousands of artifacts amid more than 19 acres of indoor exhibit space. The museum opened to the public on May 16, 1923 in Dayton Ohio and has now evolved to its fourth location which includes four buildings, a Missile Gallery, an Air Park and a Memorial Park. For further information, you may click on the following weblink at: https://www.nationalmuseum.af.mil.

- ### *Seeking Nominations for The Outstanding Volunteer of The Year Award*

Dear members at large, we are seeking nominations for the 2025 IEEE Pittsburgh Section Outstanding Volunteer of the year award. This award seeks to honor an IEEE member or members who have demonstrated exemplary levels of dedication and service to IEEE in general and the Pittsburgh Section in particular over the 2024 calendar year. In order to qualify, the recipient must be an active IEEE member or student member volunteer that has contributed to IEEE in a demonstrable way. To nominate someone, please submit their name, IEEE number and a brief summary (250 words or less) highlighting their service and contributions in 2024. Nominations may be submitted via email to: jebeck@ieee.org. The cutoff date for nominations is March 31st, 2025. All nominations will be reviewed by the awards committee, and the recipient will be honored at the 2025 IEEE Pittsburgh Section's annual history and awards dinner which will be held next Spring (details to follow).

2025 Calendar – Meetings of IEEE Pittsburgh Section

	Jan	Feb	Mar	Apr	May	June	July	August	Sept	Oct	Nov	Dec
Executive Committee (AdCom)	Virtual	Virtual	Virtual	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Section		22 Robot Car (canceled)	6 Meetings tutorial	1 Science Fair	16-Awards dinner; 31-Museum		20 Picnic	22 Baseball				
Communi-cations		6 Realizing AI 12 Prudentia		5 Symposium								
Computer		20 AI Agentic										
EMBS			13 Careers, Med									
EMCS												
Power Electronics												
PES/IAS												
Magnetics												
Nanotech-nology												
Robotics												
SPS/CSS												
EPS/ED												
Education												
Social Impl Technology												
Upper Mon		10 Secure 6G	10 Agile AI/ML									
Women in Eng'ing												
Young Pros												
Life Mem-bers												
PACE												
Student Act												

* This meeting was not published in the Pittsburgh Bulletin