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All announcements for publication in a particular month's bulletin are due to the Editor by the 20th of the previous month. The accuracy of the published material is not guaranteed. If there is any error, please bring it to the Editor's attention. The Section's web site, [webinabox Pittsburgh](http://webinabox.pittsburgh.org), has recent issues of the bulletin and lots of other useful information.

• *Chair's Corner*

Welcome to the May Edition of the Pittsburgh Bulletin.

May is the start of our busy season. This month alone, we have the History Dinner with a presentation about Why Nuclear, a trip to Dayton to the Air Force Museum, and many different seminars.

Speaking of technical seminars, did you know that each society has not just a home with Pittsburgh, but with a technical board as well? IEEE, as a whole, has six governing bodies. The Pittsburgh Section lies in what is called MGA (Members and Geographic Activities), which is how we are Region 2, Pittsburgh Section. Another governing body is the Technical Activities Board (TAB). TAB is the governing body of IEEE Technical Activities and is the largest of six major boards with IEEE. Comprised of 63 voting members, TAB includes the Presidents of all 46 Societies and Technical Councils (more on those later), 10 Division Directors (who also sit on the IEEE Board of Directors), and the chairs of key TAB committees. TAB ensures the technical content you value as an IEEE member meets expectations and lives up to the standards of professionals across the globe. The other four boards are Educational Activities, IEEEUSA, Publication Services and Products, and Standards. All six work together to bring the IEEE that we know world-wide, and volunteer opportunities exist in these areas as well.

Jenna Price
2025 Pittsburgh Chair
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- ***Rapid Georeferenced Geological Face Mapping for Underground Mining***

Presenter: Bryan Nagy and Rich Juchniewicz
Date: May 5, 2025
Time: 6:30 PM to 8:30 PM
Place: Mine Vision Systems, 5877 Commerce Street, Ste 118,
in East Liberty, Pittsburgh PA 15206
Registration: Link: <https://events.vtools.ieee.org/m/477796>
Sponsor: Robotics and Automation Society
Cosponsor: Engineering In Medicine & Biology Society

Abstract: Production geologists in underground hard rock mining environments have typically used paper and colored pencils, cameras and tape measures to map and describe the geotechnical details of a working mine face for augmentation of a 3D ore body model. In most cases, this data is ingested and used to update the model several days after collection and is only very roughly accurate. These approaches and limitations result in extra personnel exposure to rockfall at the face, lost productivity, excess wasteful material processing with resultant environmental impact, and added cost in both time and resources. We present a live demo of FaceCapture - an integrated Lidar-SLAM and Camera based system to rapidly map underground mine spaces, produce high resolution textured meshes of geological features, and georeference all collected data into a mine's native coordinate system in a matter of minutes. Now in-use globally, this system increases geologist safety by minimizing their time at the unprotected face, and overall productivity by allowing near-realtime update of the ore body model and subsequent drill and blast plans

Biographies: Bryan Nagy is the CTO for Mine Vision Systems, where he is responsible for Technology, Research and Development, as well as leading NRE robotics projects for clients. He received his B.S. in Computer Science and M.S. in Robotics from Carnegie Mellon University. Before MVS he led a team at Uber's self-driving group, which was responsible for Route Planning, Navigation and Vehicle Executive operations. And before that, he was a Commercialization Specialist at CMU's National Robotics Engineering Center, where he built robotic systems to solve challenging real-world problems in the field at large scale. He also likes to dabble in the collaboration between engineering and export control.

Rich Juchniewicz is the VP of Engineering for Mine Vision Systems, where he is responsible for overseeing and managing the engineering and production teams.

- ***Legacy and Innovation: Exploring Duquesne Light's Substation Equipment Past and Present***

This talk will be given prior to the Pittsburgh Section Executive Committee Meeting on May 15, 2025 at 5:00pm at DLC Woods Run Facility. Register at: <https://events.vtools.ieee.org/m/482222>

Bio: Angela Mazza is a Substation Controls Engineer IV with six years of experience at Duquesne Light Company. She specializes in the design and integration of substation control systems, ensuring reliable power delivery across the grid. Angela holds a degree from Penn State in electrical engineering and a minor in mathematics.

- **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, Life Members, and Student 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 Region 2 Volunteers Training**

Date: May 17, 2025

Time: 9:00 AM to 4:00 PM Eastern

Place: Information Science Building
135 N Bellefield Ave, Pittsburgh, PA 15260
3rd floor, Room: 305

RSVP: **Required** at <https://events.vtools.ieee.org/m/476915> by May 10, 2025, 5:00 PM Eastern Time. Please enter your membership number in the RSVP for accurate meeting reporting.

Organizer: IEEE Pittsburgh Section

IEEE Region 2 cordially invites members who are currently active volunteers, or those thinking about becoming more engaged in the IEEE, to this upcoming training program.

The event will feature various topics to introduce the greater IEEE and assist members with how to perform the various roles. Hear from various IEEE leaders and walk-away with a keen understanding of the organization and ways you can get involved!

Lunch and Coffee will be provided

A Remote Option will be available; however, in-person is strongly encouraged

Tentative Agenda:

Session Time	Topic	Speaker	In Person or Virtual
9:30 AM	Networking/Coffee	All	In-Person
10:00AM	Introductions	Phil Gonski	In-Person
10:05 AM	Structure of IEEE Above Section	Bala Prasanna	Virtual
10:30 AM	IEEE VTools / OU Analytics	Eugene Khusid	Virtual
11:00 AM	Chapters & Affinity Groups	Kal Sen	In-Person
11:30 AM	Roadmap of MGA Training Resources for Officers (Stephen - Remote)	Stephen Torpie	Virtual
lunch	LUNCH	All	In-Person
1:00 PM	IEEE Student Chapters/Branches	Helen Winfrey	In-Person
1:30PM	Ethics	Oscar Tonnello	Virtual
2:00 PM	Young Professionals	Sam Stone	Virtual
2:30 PM	Budget/ Financial Planning	Phil Gonski	In-Person
3:00 PM	Jeopardy	Phil Gonski	In-Person
3:30 PM	Recap		In-Person

- ***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>.

- ***IEEE Pittsburgh Section Members Family Picnic***

When: Saturday, July 20, 2025, noon - 5pm.
Where: Monroeville Park East, 2336 Tilbrook Road, Monroeville, PA 15146.
Register by: July 6, 2025.
Registration: link: <https://events.vtools.ieee.org/m/456475>

We welcome IEEE Pittsburgh Section members, their families and partners to a picnic. We would like to celebrate the hard work of all our IEEE volunteers. Free and delicious food and soft drinks will be served. Bring your favorite outside games (like corn hole etc.) and arm chairs.

Please register each family member separately for an accurate headcount. Registration is limited to 50 people on a first-come-first-serve basis. Thank you again to all of our volunteers!

- ***IEEE Pittsburgh Section Baseball Outing with Tailgate Party***

Date: Friday, August 22, 2025
Time: 5:00 PM: Arrival
5:30 PM: Dinner
6:40 PM: Game – Cincinnati Reds at Pirates (Zambelli Fireworks Night)
Place: The PNC Park – Parking Lot GOLD1 (next to the garage)
<http://alcoparking.com/heinz-field-pnc-park/pirates-parking/>
Phone: 412-596-2690
Cost: \$34 per ticket (\$10 discount at the concession stands), no charge for Food
Organizer: IEEE Pittsburgh Section.
RSVP: **Required** by July 22, 2025. Seating at \$34 price is limited to 50 people on a first-come-first-serve basis. Register online at: <https://events.vtools.ieee.org/m/482531>. After August 1, please rsvp for food, but purchase your own ticket at dynamic pricing and separate seating from the IEEE group. Please send your check, payable to “IEEE Pittsburgh Section,” to Mey Sen, 126 Pauline Dr., Monroeville, PA 15146. Please provide the name(s) of your guest(s), if any. For any question, please write to Kal Sen at senkk@ieee.org.

2025 Calendar – Meetings of IEEE Pittsburgh Section

	Jan	Feb	Mar	Apr	May	June	July	August	Sept	Oct	Nov	Dec
<u>Executive Committee (AdCom)</u>	Virtual	Virtual	Virtual	Mt. Lebanon library	DLC Woods Run + talk	TBD	TBD	TBD	TBD	TBD	TBD	TBD
<u>Section</u>		22 Robot Car (canceled)	6 Meetings tutorial	1 Science Fair	16-Dinner; 17 Training 31-Museum		20 Picnic	22 Baseball				
<u>Communications/VT</u>		6 Realizing AI 12 Prudentia		5 Symposium 7 Charging								
<u>Computer</u>		20 AI Agentic										
<u>EMBS</u>			13 Careers, Med		5 Geo-mapping							
<u>EMCS</u>												
<u>Power Electronics</u>				7 Charging								
<u>PES/IAS</u>												
<u>Magnetics</u>												
<u>Nanotechnology</u>												
<u>Robotics</u>					5 Geo-mapping							
<u>SPS/CSS</u>												
<u>EPS/ED</u>												
<u>Education</u>												
<u>Social Impl Technology</u>												
<u>Upper Mon</u>		10 Secure 6G	10 Agile AI/ML									
<u>Women in Eng'ing</u>												
<u>Young Pros</u>												
<u>Life Members</u>												
<u>PACE</u>												
<u>Student Act</u>												

* This meeting was not published in the Pittsburgh Bulletin