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Editor: Philip Cox, p.e.cox@ieee.org; Contributors: Joe Cioletti, Steve Dobos, Gianfranco Doretto, Brandon Grainger, Joe Kalasky, Jim Lagree, Drew Lowery, Steve Mozelewski, Balaji Palanisamy and Ralph Sprang

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, http://sites.ieee.org/pittsburgh, has recent issues of the bulletin and lots of other useful information.
• Notes From the Chair

In the spring of 1884, a small group of individuals in the electrical professions met in New York, USA. They formed a new organization to support professionals in their nascent field and to aid them in their efforts to apply innovation for the betterment of humanity—the American Institute of Electrical Engineers, or AIEE for short. That October, the AIEE held its first technical meeting in Philadelphia, PA, USA.

IEEE Day is celebrating that time in history when engineers worldwide and IEEE members gathered to share their technical ideas. One of the IEEE Day’s objectives is to show the ways thousands of IEEE members in local communities join to collaborate on ideas that leverage technology for a better tomorrow. We celebrate IEEE members! IEEE Day is officially always celebrated on the first Tuesday in October. This year that date is October 3.

IEEE Day’s theme this year is: “Leveraging Technology for a Better Tomorrow”. While the world benefits from what’s new, IEEE continues to focus on what’s next. Additional information can be found on the official website, ieeeday.org.

Also, as we move into our last quarter of the year, and the fall has started, IEEE Pittsburgh activities are in full swing. All our technical societies are planning and hosting meetings throughout the rest of the year, engaging current members, and hoping to meet new ones. Watch the bulletin and webpage for event topics, and come out and join us!

Drew Lowery
2017 IEEE Pittsburgh Section Chair
• Pennsylvania State Representative Joe Markosek

Date: Thursday, October 5, 2017  
Time: 5:30 PM light dinner and discussion  
Place: Old Energy Center Site: 4350 Northern Pike, Monroeville PA 15146  
RSVP: Register at https://events.vtools.ieee.org/m/46642 by noon on Thursday, October 5, 2017. Please provide telephone, email address, and IEEE membership number. This is a PACE event and the contact is Joe Cioletti (jcioletti@ieee.org). Co-sponsored by Society for Social Implications of Technology (SSIT).

Abstract: Joe Markosek will cover current PA legislative agenda items that include his expertise in transportation, budget, appropriations, technology, business in addition to fielding questions from those attending this informal session. Business climate is a key factor in our regional resurgence in high technology industries and Joe has a longstanding expertise in government that stems from his roots in Westinghouse Nuclear!

Biography: Joe Markosek is serving an 18th term as the representative for the 25th Legislative District in the Pennsylvania House of Representatives. During his 30-plus years in office, he has never missed a day when the House was in session.

Joe is the Democratic chairman of the House Appropriations Committee, as elected by his peers. The committee, which is composed of 15 Democratic and 22 Republican members, conducts budget hearings each spring to review and evaluate the governor’s executive budget proposal. It also meets regularly when the House is in session to evaluate bills for fiscal implications before they move forward in the legislative process.

Joe served as Democratic chairman of the House Transportation Committee during a period of major challenges. His leadership led to the passage of Act 44 of 2007, Pennsylvania’s major transportation funding mechanism, which increased transportation funding by more than $2 billion. He also was the catalyst for the widening of the Route 22 corridor in the Murrysville region of his legislative district, and recently cut the ribbon to mark the completion of the Route 286 Golden Mile Highway Improvement Project.

Joe has worked throughout his career to provide improved and comprehensive services for Pennsylvania’s citizens with developmental disabilities, particularly those with autism spectrum disorders. He also led special committees to investigate issues like auto theft and problems specific to older drivers. While he is pleased the legislature enacted a texting ban to help make our roads safer, he continues to work to enact comprehensive distracted driving legislation.

Joe is also active at home, championing funding for libraries, youth facilities, local governments, EMS providers, transportation improvements, health-care organizations, and local access for senior citizens and people with disabilities. He is an active member of the Monroeville Area and Plum chambers of commerce, as well as the Murrysville Library Foundation Board. He also sits on the Pennsylvania School Employees Retirement System Board and the Pittsburgh Supercomputing Center Advisory Committee.
Joe is a 1972 graduate of the University of Notre Dame. He has a son, Brandon. Rep. Markosek is a life-long resident of Allegheny County and is also an avid Pittsburgh sports fan. He is active in his church, St. Bernadette Parish in Monroeville.

Before taking office in 1983, Joe worked with Westinghouse Water Reactor Division as a buyer of nuclear components. He was sent to Three Mile Island as part of the repair/recovery team immediately following the nuclear accident in 1979.

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**Dynamic Interactions and Stability Issues in Electronic Power Distribution Systems**

**Speaker:** Dr. Paolo Mattavelli  
**Title:** IEEE Distinguished Lecturer, Professor, University of Padova (Italy)  
**Date:** Friday, October 6th, 2017  
**Time:** Refreshments - 6:30 PM; Presentation - 7:00 PM  
**Place:** John A. Swanson School of Engineering  
University of Pittsburgh  
Benedum Engineering Hall – Room 102  
3700 O’Hara Street  
Pittsburgh, PA 15261

**RSVP:** Required at [https://meetings.vtools.ieee.org/m/46892](https://meetings.vtools.ieee.org/m/46892) by October 5th, 2017. If you are an IEEE member, you must enter your membership number. If you would like to receive PDH, please bring a copy of this announcement for verification of your attendance and your membership identification card. A non-member who would like to receive PDH is required to pay $10 to “IEEE Pittsburgh Section.”

**Organizer:** Power Electronics Society (PELS)

**Abstract:** The increasing number of renewable energy sources and energy storage devices connected to the grid has the potential to progressively increase the network performance in terms of efficiency, stability and demand response, while allowing full exploitation of any kind of Distributed Energy Resources (DERs). For this purpose the electronic power processors (EPPs) interfacing the power sources or storage elements with the distribution grid must be driven properly, controlling their active and reactive currents and harmonic distortion so as to improve power sharing, voltage stability and distribution losses. This lecture is aimed to give the fundamental knowledge of stability of electronic power processors used in Distributed Energy Resources in future microgrids, focusing in the interaction and stability of ac and dc microgrid using the impedance-based approach. The seminar will also highlight some other recent issues related to DERs developed at the University of Padova, including single-stage step-up VSI topology, the impedance emulation for hybrid grids, etc.
**Speaker:** Paolo Mattavelli received the Ph.D. degree in electrical engineering from the University of Padova (Italy) 1995. From 1995 to 2001, he was a researcher at the University of Padova. From 2001 to 2005 he was an associate professor the University of Udine, where he led the Power Electronics Laboratory. In 2005 he joined the University of Padova in Vicenza with the same duties. From 2010 to 2012 he was a professor and member of the Center for Power Electronics Systems (CPES) at Virginia Tech. He is currently (2017) a professor at the University of Padova, leading the Power Electronics Lab. in Vicenza.

His major field of interest includes analysis, modeling and analog and digital control of power converters, grid-connected converters for renewable energy systems and micro-grids, high-temperature and high-power density power electronics. In these research fields, he has been leading several industrial and government projects. He has published more than 100 journal papers and more than 250 conference papers. His current google h-index is 57.

From 2003 to 2012 he served as an Associate Editor for IEEE Transactions on Power Electronics. From 2005 to 2010 he was the IPCC (Industrial Power Converter Committee) Technical Review Chair for the IEEE Transactions on Industry Applications. For terms 2003-2006, 2006-2009 and 2013-2015 he has been a member-at-large of the IEEE Power Electronics Society’s Administrative Committee. He also received in 2005, 2006, 2011 and 2012 the Prize Paper Award in the IEEE Transactions on Power Electronics and in 2007, the 2nd Prize Paper Award at the IEEE Industry Application Annual Meeting. He is an IEEE Fellow.

**DIRECTIONS TO SWANSON SCHOOL OF ENGINEERING**

**Official Address:** 3700 O’Hara St, Pittsburgh, PA 15261

**Parking:** Consider parking in either O’Hara Parking garage (across the street from Benedum Hall) or Soldiers and Sailors parking garage. Street parking is also free after 6pm if available.
Taking A Tour With Uber - ATG

(Advanced Technologies Group)

Date: Tuesday- October 17\textsuperscript{th}, 2017
Time: 11AM to 1PM (Engineering Area and Auto Floor)
Lunch will be provided by Uber
Location: Uber ATG 50 33rd Street, Pittsburgh PA 15201 (The Strip District)
Attendance/Cost: free to IEEE Members and Guests
Questions: Steve Dobos 412-559-0235 / Nick O’Donoughue
Tour Guide: Sarah Abboud

Registration closes early! Please sign up by COB Monday October 9\textsuperscript{th}, 2017– Uber Security needs to review and log attendees.

Please register for the Uber Engineering Tour at the following link:
https://meetings.vtools.ieee.org/m/47185

PDH's: If you would like to receive PDHs, please bring a copy of this announcement to this meeting and please contact Steve Dobos/Dave Vaglia for verification of your attendance. A non-Member who would like to receive PDHs is required to pay $10 to IEEE Pittsburgh Section. A Member who would like to receive PDH is required to show membership ID.

Please join the Pittsburgh IEEE Industrial Applications Society/Power and Energy Society Joint Chapter, and also the Pittsburgh IEEE Signal Processing Society/Control Systems Society Joint Chapter, as we tour one of the most exciting new stars on the Pittsburgh landscape - Uber ATG!!! This is the facility where Uber Self Driving Vehicles are developed, engineered, tested, and then deployed on the streets of Pittsburgh!!! We will be touring the development, engineering, and automotive departments. This is a Lunchtime engineering tour from 11AM to 1PM on Tuesday October 17\textsuperscript{th}, 2017.

At Uber ATG they are ambitious, engaged and excited about transforming the way the world moves. With locations in Pittsburgh, San Francisco, and Toronto, the Advanced Technologies Group is comprised of Uber’s self-driving engineering team dedicated to self-driving technologies, mapping, and
vehicle safety. Their teams are passionate about developing long-term technologies that advance Uber’s mission of bringing safe, reliable transportation to everyone, everywhere. Uber’s work doesn’t end with transporting people. They are also developing self-driving truck technology to move goods more safely and cost effectively around the world.

Uber’s Safety & Systems Engineering team is charged with ensuring that, at every stage of development, their self-driving vehicles are demonstrably safe when operating on public roads. Uber also hold primary responsibility for establishing durable specifications that will guide the integration of self-driving technology onto the Uber network at global scale.

**Directions to Uber from Downtown Pittsburgh:**

Take Downtown Liberty Ave to 32nd St.
Turn left onto 32nd St
Turn right at the 2nd cross street onto Penn Ave
Turn left at the 1st cross street onto 33rd St.
Uber is on the left at 50 33rd St. Pittsburgh PA 15201

- **Interactive Exploration of Multidimensional Images in Virtual Reality**

  **Speaker:** Gianfranco Doretto, Ph.D.
  **Date:** Thursday, Oct. 19, 2017
  **Time:** 5:00 PM – 6:00 PM
  **Place:** 135 Advanced Engineering Research Building
  West Virginia University, Morgantown, WV

**Abstract:** The quest for deeper understanding of biological systems has driven the acquisition of increasingly larger multidimensional image datasets. Inspecting and manipulating data of this complexity is very challenging in traditional visualization systems. In this talk we are going to describe the technical challenges and how they can be overcome in order to visualize large scale volumetric data with inexpensive virtual reality head-mounted display technology. This allows leveraging stereoscopic vision to significantly improve perception of complex 3D structures, and provides immersive interaction with data directly in 3D. We will overview the main architecture and features we have developed in a highly optimized software package called syGlass. We will summarize the data flow and volume rendering pipelines of syGlass, as well as the tools available in a virtual reality GUI to support advanced data exploration, annotation, and cataloguing of datasets of several tens of TB of data.

**Speaker Bio:** Gianfranco Doretto is an Associate Professor in the Lane Department of Computer Science and Electrical Engineering. He received the Ph.D. and M.S. degrees in Computer Science from...
the University of California, Los Angeles (UCLA), in 2005 and 2002 respectively, and a D.Eng. degree in Electronics Engineering from the University of Padua, Italy, in 1998. His research interests span several computer vision areas, with a current focus on statistical modeling of image and video signals for automated content extraction. Prior to joining WVU he was a lead scientist and project leader within the Visualization and Computer Vision Laboratory of General Electric Global Research. Dr. Doretto regularly serves on technical program committees for the primary computer vision conferences (ICCV, CVPR, ECCV), and is a reviewer for premier journals in computer vision and related areas (TPAMI, IJCV, CVIU, TIP, MVA). He is an inventor on 11 patents, and the author of more than 60 academic publications. He is the Chair of the IEEE UpperMon Subsection, and a member of Sigma Xi.

**On System-Level Analysis & Design of Cellular Networks: The Magic of Stochastic Geometry**

**Speaker:** Dr. Marco Di Renzo, IEEE Distinguished Lecturer  
**Date:** October 19th, 2017  
**Time:** 7:00 pm - 8 pm; Reception with Pizza starts at 6:30 pm.  
**Venue:** 3rd floor theater, IS Building at Pitt (135 N Bellefield Ave, Pittsburgh, 15260).  
**Sponsors:** Communications Society and Signal Processing Society

**NOTE:** Dr. Di Renzo is also presenting this talk on Oct. 20th, 11:00 AM – 12:00 PM at WVU, 135 Advanced Engineering Research Building

**Abstract:** This talk is aimed to provide a comprehensive crash course on the critical and essential importance of spatial models for an accurate system-level analysis and optimization of emerging 5G ultra-dense and heterogeneous cellular networks. Due to the increased heterogeneity and deployment density, new flexible and scalable approaches for modeling, simulating, analyzing and optimizing cellular networks are needed. Recently, a new approach has been proposed: it is based on the theory of point processes and it leverages tools from stochastic geometry for tractable system-level modeling, performance evaluation and optimization. The potential of stochastic geometry for modeling and analyzing cellular networks will be investigated for application to several emerging case studies, including massive MIMO, mmWave communication, and wireless power transfer. In addition, the accuracy of this emerging abstraction for modeling cellular networks will be experimentally validated by using base station locations and building footprints from two publicly available databases in the United Kingdom (OFCOM and Ordnance Survey). This topic is highly relevant to graduate students and researchers from academia and industry, who are highly interested in understanding the potential of a variety of candidate communication technologies for 5G networks.

**Bio:** Marco Di Renzo received the "Laurea" and Ph.D. degrees in Electrical and Information Engineering from the University of L’Aquila, Italy, in 2003 and 2007, respectively. In October 2013, he received the Doctor of Science degree from the University Paris-Sud, France. Since 2010, he has been a "Chargé de Recherche Titulaire" CNRS (CNRS Associate Professor) in the Laboratory of Signals and Systems of Paris-Saclay University - CNRS, CentraleSupélèc, Univ Paris Sud, France. He is an Adjunct Professor at the University of Technology Sydney, Australia, a Visiting Professor at the University of L’Aquila, Italy, and a co-founder of the university spin-off company WEST Aquila s.r.l., Italy. He serves as an Editor of IEEE Communications Letters, IEEE Transactions On Communications, and IEEE Transactions On Wireless Communications. He is a Distinguished Lecturer of the IEEE Vehicular Technology Society and IEEE Communications Society. He is a recipient of several awards, and a frequent tutorial and invited speaker at IEEE conferences.
Biomedical System Modeling

Presenter: Natasa Miskov-Zivanov, PhD
Topic: Biomedical System Modeling: Rapid in silico system explanation via automated reading, model assembly and analysis
Date: Monday, October 23, 2017
Time: 6:30 PM – 7:00 PM Dinner (Pizza, Salad)
7:00 PM – 8:00 PM Presentation and Q&A
Location: Benedum Hall
Parking: Soldiers & Sailors Hall
Room 102 University of Pittsburgh
3700 O’Hara St.
Pittsburgh, PA 15213

Registration: https://meetings.vtools.ieee.org/meeting_view/list_meeting/47168
Deadline: Register by Oct. 20, 2017
Event Sponsor:

Summary: Biomedical research results are being published at a high rate, and with existing search engines, the vast amount of published work is usually easily accessible. Still, reproducing or reusing published results, either experimental data or observations, is often not feasible. To accurately reuse this voluminous knowledge that is fragmented and sometimes inconsistent, one can extract and assemble published information into models. Modeling explains systems that we are studying, guides our data collection, illuminates core dynamics of systems, discovers new questions, or challenges existing theories. However, the creation of models often relies on intense human effort: model developers have to read hundreds of published papers, and conduct discussions with domain experts, in order to assemble accurate and useful models. This laborious process results in slow development of models, as it includes steps such as model validation with experimental data and model extension with new available information. Automation of this process is necessary to build accurate models that will enable our comprehensive and timely understanding of systems in many areas of science.

In this talk, I will present recent efforts to automate the process of explaining biological observations and answering biological questions. As the first step in the automation flow, several automated reading engines have been developed to extract events, that is, interactions between biological entities, from literature. These automated readers are able to find hundreds of thousands of biological entity interactions from a large number of papers in a few hours. Next, we have built a framework, DySE (Dynamic System Explanation), which automatically assembles models, extends them with the interactions extracted by automated reading engines, and analyzes the models for various conditions and scenarios. The framework includes various techniques, such as simulation, formal methods, and sensitivity analysis. The overall process of automated reading, assembly and reasoning can speed up discoveries from the order of decades to the order of hours or days. Our framework allows for rapidly conducting thousands of in silico experiments that are designed as part of this process.
We have applied DySE on studying cancer microenvironment, specifically pancreatic cancer cells and their interactions with immune system cells, as well as on explaining the mechanisms of various drugs used in melanoma. Finally, the techniques and the modeling approach incorporated within the framework are not disease specific, and therefore, DySE can be used for explaining systems in other domains.

**Bio:** Natasa Miskov-Zivanov is an Assistant Professor of Electrical and Computer Engineering, Bioengineering, and Computational and Systems Biology at University of Pittsburgh. She also holds an adjunct faculty position in Electrical and Computer Engineering at Carnegie Mellon University. Dr. Miskov-Zivanov received her B.Sc, degree in electrical engineering and computer science from University of Novi Sad, Serbia, in 2003, and her M.Sc and Ph.D. degrees in electrical and computer engineering from Carnegie Mellon University, in 2005 and 2009, respectively. Before joining University of Pittsburgh as a faculty in 2016, she spent several years as a postdoctoral researcher in Computational and Systems Biology at the University of Pittsburgh, and as research scientist and instructor in Computer Science and in Electrical and Computer Engineering at Carnegie Mellon University. Dr. Miskov-Zivanov’s research interests include automation of learning big mechanisms in biology, systems and synthetic biology, systems medicine, and multi-scale modeling and simulations. She founded CMU’s first iGEM team in 2011, has been an advisor of CMU and Pitt iGEM teams since then, and she has been on the organizing committee of the International Workshop on Bio-Design Automation since 2010. She is currently a PI on DARPA-funded AIMCancer project.

- The History of Cybersecurity

**Date:** Tuesday, October 24, 2017  
**Time:** 6:30 PM to 8:00 PM  
**Place:** Cranberry Township Library  
**Organizer:** Computer Society  
**RSVP:** at [https://events.vtools.ieee.org/m/47293](https://events.vtools.ieee.org/m/47293). IEEE membership number is required.

**Abstract:** As recent events have demonstrated, cybersecurity is becoming increasingly important in almost all aspects of modern life, from personal finance to the electric grid to geopolitics. The potential for negative impacts will continue to increase as businesses, governments and society become more and more dependent on digital information processing systems. In order to build systems and shape behavior that can account for these risks, we need to understand the circumstances that contributed to our current situation.

This talk is a review of significant events in the history of computer and network security and is based on literature reviews, news articles, interviews and the speaker’s personal and professional experience. It is presented in timeline format starting with a brief review of pre-computer information security. The timeline divides itself into four eras that are aligned with advances in general computing technology: the run-up and aftermath of World War II, mainframes and the adoption of business systems, the public switched telephone network boom, and the rise of Internet.

The presentation tries to make the case that there are no new problems, only old problems reinterpreted for new technologies. It is delivered in a straightforward format conveying the facts as they were.
recorded by history, but also includes analysis that highlights the human elements that are sometimes humorous, somber, amusing or tragic. The goal of this talk is to encourage discussion among the participants who lived and worked through these times in order to add to the body of work.

Bio: George Warnagiris is a professional information security analyst and a novice computer historian. He currently works at a global firm that engineers and manufactures advanced materials and is headquartered in Butler County. He has been in the field of information technology for the past 18 years with several companies in multiple sectors including finance, academia, government, manufacturing, chemical processing and power generation.

Mr. Warnagiris is an IEEE Senior Member and holds a B.A. in Computer Science with a minor in Mathematics from Hunter College, City University of New York. George originally performed the cybersecurity history research in 2011, but has continued to update it with new information gathered from interviews and group discussions like this one.

- **National Energy Technology Laboratory Tour**

Sponsored by: Society for Social Implications of Technology & Professional Activities Committee

| Tour Date: | Wednesday, November 8, 2017 |
| Tour time: | 1 PM (approximately 2 hours) |
| Location: | 1354 Wallace Rd, South Park Township, PA 15129. A precise meeting point will be provided to all registrants. Be sure to include your email address in the vtools registration. |

Link to Registration: [https://events.vtools.ieee.org/m/46618](https://events.vtools.ieee.org/m/46618)

We are privileged to announce that a walking tour of the National Energy Technology Laboratory has been arranged.

**IMPORTANT Notes to ATTENDEES:**

As clearly mentioned in the September Bulletin, the last date for non-US citizens to file clearance forms was September 22. US citizens must bring a valid ID, which can be a passport or driver’s license. PA Driver’s License will suffice or bring a valid Passport. If from another state, please let us know which state by November 6 (j.kalasky@ieee.org) and we will confirm. You may need additional ID because several states do not have licenses that meet DOE standards.

ALL VISITORS MUST WEAR CLOSED TOE SHOES! NO EXCEPTIONS!

The tour is open only to IEEE Members.
The National Energy Technology Laboratory (NETL), part of the U.S. Department of Energy (DOE) national laboratory system, is owned and operated by the DOE. NETL supports the DOE mission to advance the energy security of the United States.

NETL implements a broad spectrum of energy and environmental research and development (R&D) programs that will return benefits for generations to come. These include:

- Enabling domestic coal, natural gas, and oil to economically power our Nation’s homes, industries, businesses, and transportation.
- Protecting our environment and enhancing our energy independence.

NETL has expertise in coal, natural gas, and oil technologies; contract and project management; analysis of energy systems; and international energy issues.

In addition to research conducted onsite, NETL’s project portfolio includes R&D conducted through partnerships, cooperative research and development agreements, financial assistance, and contractual arrangements with universities and the private sector. Together, these efforts focus a wealth of scientific and engineering talent on creating commercially viable solutions to national energy and environmental problems.

The IEEE tour of the laboratory facility includes a detailed presentation to our group.

IEEE members who are US citizens must make a reservation by **November 1**

The tour is limited to the first twenty approved registrants.
• **Call for Volunteers**

The IEEE Pittsburgh Section is seeking volunteers for the position of assistant treasurer and secretary.

The secretary and assistant treasurer position are the first rungs on the ladder of executive committee roles, and the duties include:

- The secretary is responsible for the monthly meeting minutes, gathering the section updates, next month’s agenda and maintaining the vitality scorecard records.
- The assistant treasurer assists the treasurer by entering transactions and helping to maintain our financial records,

Both positions would:

- communicating and coordinating with other IEEE sites, including the national headquarters in Piscataway NJ,
- serving as a voting member of the IEEE Pittsburgh Section executive committee, attending our meetings, and participating in our events,
- gaining experience and understanding of IEEE and our activities, as a pre-requisite for seeking volunteer positions of greater responsibility.

In order to apply, you must be an active IEEE member in good standing. Previous volunteer experience is a plus but not strictly necessary. All that's really needed is a desire to volunteer and a willingness to learn. The time commitment is not great, along the lines of a few hours per week. All interested respondents will be vetted by the nomination committee, and the nomination committee will select one or more qualified candidates to include on the ballot in our upcoming election. Ideally, we are seeking candidates that are willing to take on this challenge, and then use the knowledge they've gained to take on other volunteer roles. If this sounds like something that interests you, or if you have questions about it, please contact me: J.L.Lagree@IEEE.org

Thanks,
Jim Lagree, IEEE Pittsburgh Section Past-Chair, 2017.

• **IEEE Annual Dues Cycle**

The annual membership dues cycle for IEEE has reset as of mid-August. What does this mean to you? It means that the reminders to renew your membership for 2018 will begin going out within the next month or two. Please take time to renew as early as possible. There is an automatic renewal option for those of you who just can’t seem to remember to renew each year (despite all of the reminders!).

If you are not currently a member and are reading this newsletter because a member shared it with you, please consider becoming a member. You may know that membership in IEEE can be an important part of your career growth as well as your own personal growth. The best part is that, if you become a member now, you will receive membership for the remainder of 2017 as well as for all of 2018 for the regular annual fee. If you have been “on the fence” about becoming a member or re-instating membership, now is a good time!
## New Members Welcomed to the Pittsburgh Section

Within the last month, the following members joined the IEEE Pittsburgh section

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<th>Member</th>
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IEEE Day Membership Promotion:
Duplicate and share these coupons. NEW members get US$30 off their first year of IEEE Membership. Applicable to higher-grade members that join between 1 October and 17 October 2017 (not applicable to student membership).

Use Promotion code: IEEEDAY17

Join us in celebrating the 8th anniversary of IEEE Day, a day commemorating the first time IEEE members gathered to share their technical ideas in 1884.

Engage your members with IEEE Day participation:
For more details, visit ieeeday.org

Stay connected with all of the great events and activities planned for IEEE Day – 3 October 2017. Follow IEEE Day on each of these popular social sites for more information, pictures, videos, and other great content.

facebook.com/IEEEday

plus.google.com/+IEEEdayOrg

twitter.com/IEEEday

Join our IEEE Day Community
ieee-collabratec.ieee.org/app/community/48

or visit ieeeday.org

IEEE Day 2017
Come be a part of the world’s largest technical community leveraging technology for a better tomorrow!

Join IEEE between 1 October and 17 October 2017 and receive US$30 off your first-year membership!
Use promotion code IEEEDAY17 when you join online at: ieee.org/join

The Details:
Offer only applies to first-time professional members. This certificate entitles you to a US $30 discount on the full IEEE Membership dues for the first year.
Offer does not apply to IEEE society membership, students, or existing IEEE Membership renewals.

To Join IEEE and receive the discount:
2. Fill in the name and member number of the member who referred you (if applicable).
3. Enter code IEEEDAY17 in the Promotion Code Field.
4. Or, if you are completing a paper application, it must be postmarked by 17 October 2017.

Note: Cannot be combined with other offers, incentives, or special circumstance discounts.

IEEE Day 2017
Come be a part of the world’s largest technical community leveraging technology for a better tomorrow!

Join IEEE between 1 October and 17 October 2017 and receive US$30 off your first-year membership!
Use promotion code IEEEDAY17 when you join online at: ieee.org/join

The Details:
Offer only applies to first-time professional members. This certificate entitles you to a US $30 discount on the full IEEE Membership dues for the first year.
Offer does not apply to IEEE society membership, students, or existing IEEE Membership renewals.

To Join IEEE and receive the discount:
2. Fill in the name and member number of the member who referred you (if applicable).
3. Enter code IEEEDAY17 in the Promotion Code Field.
4. Or, if you are completing a paper application, it must be postmarked by 17 October 2017.

Note: Cannot be combined with other offers, incentives, or special circumstance discounts.
## 2017 Calendar – Meetings of IEEE Pittsburgh Section

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<th>Jan</th>
<th>Feb</th>
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<td>U Pitt Robinson</td>
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<td>Panera Galleria</td>
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<td>7</td>
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<td>History Dinner</td>
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