



Philadelphia Section

CANDIDATES & BIOGRAPHIES

Candidates for Chair: Gonski and Hrebein

Chair Candidate: Philip Gonski

Position Statement

The IEEE Philadelphia is the largest technical society in the Delaware Valley Area, with over 4,000 members who are part of numerous industries in surrounding area. As a large society, we oftentimes are slow to respond to the individual needs of membership and changing economic times. Despite this, we also possess the enormous potential to become the center of the electrical community in the Philadelphia area, as well as a hub of economic and personal development for our membership.

My plan as an active IEEE Volunteer, and serving as 2012 Secretary, and 2013 Treasurer, has been to adapt the organization to our membership, as well as make a difference in our local community. By initiating the section's social media efforts on LinkedIn, I have been able to receive feedback from members, and have turned these ideas into IEEE events held at various Philadelphia suburban locations. Furthermore, conferences are currently in the planning stages, based upon membership feedback. Members have also been interested in licensing renewal, which has led to my recent efforts to offer PDH certificates, as well as New York Continuing Education credits.

As Engineers, it is our obligation to help local students discover and learn about the profession we love. I plan to continue and further develop outreach programs that the IEEE has helped spearhead in recent years, which will help to increase our visibility within the community. Both myself, and other IEEE members, have been actively assisting in local science fairs, and participating in the launch of a new website for children and teens, to help attract them to learn more about engineering (www.discoverengineeringphilly.com). I hope to encourage our members to help local schools, serve as a technical resource for the Philadelphia area, and inspire the next generation of engineers.

As 2014 Chair, I plan to build upon my established track record by incorporating the following programs into the IEEE Philadelphia.

- Technical meetings in various suburban venues, or corporate locations.
- PDH opportunities and CEU offerings for our licensed engineers at low cost.
- Further develop IEEE relationships with our local universities for technical meetings, and collaboration on course offerings to engineers.

- Facilitate outreach programs with local grammar and high schools, to increase our presence within the community.
- Organize meetings with other engineering societies, for technical, volunteer, and networking opportunities.
- Implement an IEEE Meeting Request form, allowing members to request meetings in their area.
- Reinvigorate GOLD (Graduates of the Last Decade), to provide networking and technical guidance to recent graduates.
- Increase our presence in local university IEEE chapters. Supplement our additional outstanding volunteers, and provide resume' reviews, mock interviews, and mentoring to local IEEE student chapters.
- Provide support to IEEE Societies, especially those that have a large number of members in the area, but no active meetings.
- Continue to provide support to all of our active societies, ensuring adequate funding and support to encourage growth.

The IEEE is not centered just around one city, one university, or one branch of electrical engineering, but resides with the membership. As chair, I plan to build upon my proven track record to reinvigorate the IEEE and provide a more true value of membership.

Biography

Philip M Gonski, P.E has been active in both the volunteer and professional community in the Philadelphia Area. A graduate of the University of Illinois – Urbana, Philip started his career at Sargent & Lundy, LLC, designing power plants around the world. After rising to the rank of Senior Engineer, Philip served as a lead engineer in the design of the country's largest biodiesel power plant on the island of Oahu, and later in the design of one of the largest combined cycle power plants in the world (3200MW) in Saudi Arabia. At night, Philip took courses in Energy and Power Engineering, and earned a Master's Degree from University of Illinois-Chicago.

In 2011, Philip moved to Philadelphia and began working as an electrical project manager for the Keystone Engineering Group, Inc. in Frazer, Pennsylvania. Since joining Keystone, Philip has designed and managed a wide spectrum of projects, including replacement of a wastewater plant's substation, a lighting retrofit at a major train station, and design and calculations for several new cogenerating power facilities in the surrounding area.

Philip is very active in the professional engineering community. He served as the 2012 IEEE Philadelphia Secretary as well as the 2013 Section Treasurer. His volunteer efforts have ranged from volunteering at local science fairs, serving on local scholarship boards, as well as writing the technical content for a website to foster youth interest in engineering. He hopes to continue this tradition of service by running for 2014 Section Chair, where he hopes to increase the sections' member outreach and volunteer efforts. In addition to his participation in professional organizations, Philip has authored multiple technical articles, including "Diagnosing Motor Bearing Currents," published in the *EC&M Magazine* in August 2012, as well as "Arc Flash

Hazards in the Water Industry,” published in *Waterworld* Magazine. Philip has also been chosen to be a guest speaker for the IEEE and PSPE Valley Forge as well as an instructor at the 2013 NSPE Boot Camp East and West.

Philip M. Gonski is a licensed professional engineer in Pennsylvania, Illinois, Maryland, Michigan, and West Virginia.

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**Chair Candidate: Leon Hrebien, Ph.D.**

**Position Statement**

The Philadelphia Section needs to implement new effective programs that would energize the membership and be of practical service to the thousands of engineers, computing professionals and students in the region. We must recognize that the old approaches to member engagement have been replaced by much more dynamic and network-based methods, and we must focus on services that are not already available (and that have not been supplemented by the Internet). These services include career development assistance and networking, as well as blended on-line and face-to-face local workshops on hot technical topics. The Section should also invite to the Philadelphia area conferences on emerging areas and new technologies.

I will lead the Executive Committee of the Section to develop these programs based on what our members tell us they need. I will ensure strong interaction between the student branches and local industry, and implement outreach to recent graduates who can use advice, experience and mentoring from more established IEEE members in industry. Overall, I will focus not on perennial attempts to revive old programs but on how IEEE and IEEE Philadelphia Section can help our members energetically and effectively – on the job, in the classroom, and in their professional development.

**Biography**

Dr. Leon Hrebien is an expert on aerospace medicine, focused on dynamics and controls of biological systems on detection and estimation in large-scale databases of biological data.

Dr. Hrebien is known for his work on G-suits for aircraft pilots (worn by pilots who are subject to high levels of acceleration) and for biological pattern recognition techniques with applications to proteomics and cytometry. These techniques are used for predictive toxicology and drug development by the pharmaceutical industry.

Dr. Hrebien holds a B.S. degree (Electrical Engineering, 1972) and an M.S degree (Biomedical Engineering, 1975) from Drexel University. He received a Ph.D. from Drexel in 1980 for studies in biomedical engineering. He worked for the US Navy from 1981 to 1989, where he was Manager of the Environmental Effects Research Branch at the US Naval Air Development Center in Warminster, PA. Since then he has been with Drexel University where he is now Full Professor of Electrical and Computer Engineering and Assistant Department Head.

Dr. Hrebien is a Senior Member of IEEE and a Fellow of the Aerospace Medical

Association. He received the 2003 Professional Excellence Award and the 2007 Research and Development Award from the Life Sciences and Biomedical Engineering Branch of the Aerospace Medical Association.

Dr. Hrebien served as Guest Editor of IEEE Engineering in *Medicine and Biology Magazine* special issue on High-G Environments and the Editor of the "Science and Technology Watch" Column of the journal *Aviation, Space and Environmental Medicine*.

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## **Candidates for Vice-Chair: Fontecchio and Houston**

### **Vice-Chair Candidate: Adam Fontecchio**

#### **Position Statement**

The last two decades have seen far reaching changes in the way engineers and computing professionals work, and in the manner by which students in these disciplines are educated. Our profession is affected profoundly by the proliferation of electronic communications and by advancements in computing and computational tools. We also witness the gradual disappearance of the barriers between our disciplines and other professions, especially the life sciences. In this new environment, IEEE and the IEEE Philadelphia Section need to retool themselves to serve effectively industry professionals as well as educators and students. Among other opportunities, we should make optimal use of timely electronic delivery of information to our members about relevant new inventions, algorithms and technologies; provide for effective on-line conferences and continuing education; enable networking between professionals and between students; and increase the ties between local universities to local industry. We also have the opportunity to make the Philadelphia Area a much more central destination for technical conferences, symposia and educational workshops. As Vice Chair of the Section my main goal will be the transformation of the Section to meet these challenges, and to develop a long term plan that will make the Section once again relevant and useful to its members. I will work with the Chair and the Executive Committee of the Section to ensure that the Philadelphia Section is member-oriented, focused, nimble, and adaptive, and that it stays away from the "business as usual" approach that is guaranteed to hinder our progress. I will act to re-examine many routine activities that the Section has inherited from decades of habit, retain only what is still clearly useful, discard what is obsolete, and put the Section's efforts in pilot projects that would allow us to increase the value of membership to existing members, attract new members, and improve the retention of students in IEEE upon graduation.

#### **Biography**

Dr. Adam Fontecchio is a Professor of Electrical and Computer Engineering and the Associate Dean of Undergraduate Affairs in the College of Engineering at Drexel University. He is the Co-Director of Drexel University's Expressive and Creative Interaction Technologies (ExCITe) Center, a hub for enabling teams of faculty, students, and entrepreneurs to pursue highly multi-disciplinary collaborative projects. He is also a leading researcher in investigations of liquid crystal interactions to develop novel devices. Using electrically controlled Bragg gratings, he has developed novel multiplexed

formation techniques for reflective displays, remote sensing wavelength filtration and a novel strain gauge. He has received more than \$10M in sponsored research funding, and authored more than 80 peer-reviewed papers. He is the recipient of a NASA New Investigator Award, the Drexel Graduate Student Association Outstanding Mentor Award, the Drexel University ECE Outstanding Research Achievement Award and the International Liquid Crystal Society Multimedia Prize. Among his IEEE volunteer position is Faculty Advisor to the Drexel University Student Branch since 2006. Dr. Fontecchio holds B.A. (1996), M.S. (1998) and Ph.D (2002) degrees – all from Brown University.

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**Vice-Chair Candidate: Troy Houston**

**Position Statement**

Maintaining the Philadelphia chapter effectiveness as previous members have done whilst looking to integrate & advance our chapter using new technologies such as the cyber security or cognitive psychometrics analysis domains.

**Biography**

15 years of Aerospace with a focus on Missiles and Satellites

15 years of IT with a focus WAN/LAN designs for global networks

16 years of Military with a focus on Cyber Security

4 years of New Technologies with a focus on Nanotechnology and Neuro Psychometrics

Publications: (Cisco Press Contributing Author)

BCMSN – Building Cisco Multilayer Switched Networks; ISBN: 1587052733

ONT - Optimizing Converged Cisco Networks; ISBN: 1587201763

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**Candidates for Treasurer: Johnston and Primerano**

**Treasurer Candidate: Robert Johnston**

**Position Statement**

- Balanced Budget
- Financial support for Section and Chapter Activities

**Biography**

Education – BSEE Drexel University

Employment - 1969 to 1985 – Scan Data Corp

1985 to 1991 – Computer Peripherals Inc.

1992 to 1996 – Consultant

1996 to 2004 - Contractor to Lockheed Martin Space Systems

2004 to present – Lockheed Martin Space Systems

IEEE Membership – 21 Years

1992 to 2008 – Member of Philadelphia Section Consultants Network (CONET)

Offices held include Secretary, Newsletter Editor & Chair

2003 to Present – Member of the Philadelphia section executive committee

Offices held:

2013 Candidates & Biographies

2003 Section Secretary  
2004 Section Treasurer  
2005 Section Vice Chair  
2006 Section Chair  
2007 Section Past Chair  
2008 to Present – Section Finance Chair. (Responsible for annual financial reports to national, annual audits, section treasurer audits and section budget.)

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Treasurer Candidate: Richard Primerano

Position Statement

The Philadelphia Section manages a substantial budget and has considerable reserves (in excess of \$500,000). My primary duty as treasurer will be to make sure that the Section budget is planned and spent wisely - for supporting professional development of members, and for useful educational and student activities. I believe that the Philadelphia Section should be member-focused. The budget should reflect the centrality of the membership in all Section operation.

In addition to managing the existing funds, I will labor to increase the income of the Section by inviting IEEE conferences to Philadelphia and by making the IEEE Philadelphia Section full partner with the societies in managing these conferences. This activity will be good for members of the Philadelphia Section who would benefit from local conferences. It will also help the finances of the Section. It would allow us to spend more on tutorials and educational activities that meet member needs.

I am committed to ensuring that the members of IEEE in Philadelphia know how the Section's money which is the members' money - is spent. The budget and all financial reports will be made available on the Philadelphia Section website for all to see. This transparency will let the members gain confidence that the Executive Committee operates according to its mandate, and allow members to provide opinions and advice how we can improve IEEE plans and operations in Philadelphia.

Biography

Richard Primerano is proprietor and principal of the R&D enterprise *Forward Dynamics*, and Assistant Teaching Professor at the College of Engineering of Drexel University. He earned his Degrees at Drexel University - B.S./M.S. (2005) and Ph.D. (2010). His professional interests include robotics, ultrasonic data communication, and radio frequency communication system design. He is investigating and implementing energy-efficient robot locomotion, including crawling and hopping. Dr. Primerano is also active in through-metal data communication R&D. Applications of this technology include data transmission across pressure vessels, pipes, and drill casings. His work was published in IEEE Transactions on Automation Science and Engineering, *IEEE Transactions on Ultrasonics, Ferroelectrics and Frequency Control*, and the *Naval Engineers Journal*.



Candidates for Secretary: Nasis, Urbano, and Visell

Secretary Candidate: Vasileios T. Nasis

Position Statement

Through my volunteer work as a student first and then as a professional I have gained thorough understanding of the significance of the IEEE organization. If elected, I will use my professional experience as an academic and entrepreneur to the advantage of members in our Region in areas such as the involvement of younger engineers within the organization advocacy of the profession, entrepreneurship, continuing education, pre-university education and student activities. I will pursue activities and challenges at several levels, including:

1. Organize events with other local chapters of professional organizations in order to embrace networking and collaboration between members.
2. Organize seminars and workshops that will offer guidance to aspired entrepreneurs on how to start companies locally. One example is IEEE Entrepreneur workshop that I am organizing with other senior members of IEEE for October 2013 in Philadelphia.
3. Get the local community such as Select Greater Philadelphia, Ben Franklin, and other organizations, to support and embrace entrepreneurial events in order to encourage engineers to stay in the area and help to make Philadelphia a technological hub.
4. Get students and young professionals more involved within the organization.
5. Create a bridge between the academic and corporate world for better collaboration of their respective members.

Biography

Vasileios T. Nasis holds a Ph.D in Electrical and Computer Engineering from Drexel University where he is also a faculty member of the Electrical and Computer Engineering. His breakthrough research has earned him numerous awards, and has led to new technologies such as the single-pixel digital camera and imaging methods using micro-opto-electro-mechanical mirrors. Besides of his academic career he has also been an entrepreneur for a multitude of companies. He was the co-founder of Fotomax the first online photo printing company in Greece and since 2008 he founded a new company in Philadelphia, PA USA Netronix, Inc. Netronix has been developing fully web-based remote monitoring solution that allows the monitoring of any sensors on the field through sophisticated web-based applications. Dr. Nasis, has strong business management leadership skills and a strong engineering background. He has a clear sense of where technology is headed and has experience applying cutting-edge technology in developing innovative solutions for challenging issues.

Secretary Candidate: Leonardo F. Urbano

Position Statement

As Secretary of the IEEE Philadelphia Section, I would spearhead a major effort to overhaul the way the Section communicates with the members it serves, and make the

Section a much more effective force in the members' professional development. One of my key initiatives would be to develop and launch a new, modern, user-friendly, informative and searchable IEEE Philadelphia Section website that would be easy for our members to use and would provide a central source for Section news and events that benefit the membership.

The new website would provide members with opportunities, information on networking and informational events, and updated calendars that let members know of all pertinent professional events and opportunities they can benefit from. We will also use this website for input from the members – hear from our members what they need from the IEEE, develop local programs to meet these needs, and serve as the members' voice in national and international IEEE committees and boards to meet these needs.

I am committed to transparency and openness. I will ensure that members of the Section are invited to and can observe all meetings of the Philadelphia Section Executive Committee. I will make sure that minutes of the meetings and the budget are available timely and publicly. The members' business and the handling of the members' funds should be done in the open.

I have served the Section as the GOLD Chair (GOLD = Graduates of the Last Decade), and I plan to build on this experience to ensure that the IEEE Philadelphia Section is committed to the needs of the members and the student members, that it uses the member dues from which it benefits wisely and purposefully, and that the communication and information lines are kept open.

Biography

Leonardo Urbano received his B.S and M.S. degrees in Electrical Engineering from Drexel University in Electrical Engineering. Since 2006 he was with Lockheed Martin, where he is at present Senior Engineer in the Weapon Control Systems Department at Mission Systems and Training (MST) in Moorestown, NJ. At Lockheed Martin Mr. Urbano develops, manages and tests missile control and tracking systems for air and ballistic missile defense systems. He published work on secure wireless communications and on radar target tracking. His IEEE volunteer assignments include past service as IEEE Philadelphia Section GOLD Chair.

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**Secretary Candidate: Yon Visell**

**Position Statement**

Greater Philadelphia has a rich history of innovation in engineering and computing, and its many thousands of engineers, computer professionals and technologists continue to provide vital contributions to the profession. In fact, our region possesses more than three times the national average of engineers, scientists, and computing professionals. It is home to key aerospace, control, computing and health related industries, and to strong institutions of higher education. To ensure that professionals in our area are served well by the Section, my vision includes outreach to the membership (questionnaires, on-line discussions and focus groups) to assess their current needs and how we can improve our

services and events. We have not conducted out reach of this kind for more than a decade, and it would help us in implementing relevant programs that match the needs members and to increase the value of IEEE membership.

Tied with this outreach effort would be a campaign to increase the visibility of our profession and to improve communication with members and the public, including Internet and social media presence. It is also clear that the Section needs to strengthen its connections with high-technology industry, and work with industry and with academic institutions to support the student branches as well as local pre-university Science, Technology, Engineering and Mathematics (STEM) programs.

As one of the oldest and largest IEEE Sections, the Philadelphia Section has the means and the membership resources to develop meaningful programs for its members and to ensure the vitality of the profession by supporting the next generation of university and pre-university students. I look forward to serving you in the pursuit of these important goals, and in ensuring that the Section works for its members and for the profession in an intensive, well-planned and focused manner.

### **Biography**

Dr. Visell's engineering research and industrial practice focus on haptic display engineering, material and biomechanical contact physics, and reverse engineering of human touch perception. His work is motivated by human-machine interaction, sensorimotor learning, and interactive technologies for virtual reality.

He is currently Assistant Professor at the Electrical and Computer Engineering Department at Drexel University. He received the PhD degree from McGill University in 2011. He holds Bachelor and Master of Arts degrees in Physics from Wesleyan University and the University of Texas-Austin, respectively. He later served as post-Doctoral Fellow in the Institute of Intelligent Systems and Robotics of University Pierre and Marie Curie in Paris, and spent several years in industrial research and development.

A member of the IEEE and of the ACM, Dr. Visell is the author of more than 40 peer reviewed articles, and editor of two books on interactive technologies and virtual reality. His work has been featured in popular media including *New Scientist*, *Technology Review* (MIT), and *Fast Company*.

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