

THE REPORTER

Journal of the Central Indiana Section • IEEE

IEEE Central Indiana Section Conference

The Central Indiana Section IEEE is holding an exciting two day conference November 8th and 9th, 2013 at the Indianapolis Marriott East. Presentations will be provided from various IEEE societies and affinity groups. Please plan on attending this annual event and network with your fellow colleagues.

Conference Schedule

Times	Friday November 8	Saturday November 9	
8:00 am-8:15 am	Welcome/House Keeping	Welcome/House Keeping	
8:15am-9:15am	Computer Society	CEICN (Consultants Network)	
9:15am-10:15am	Computer Society	CEICN (Consultants Network)	
10:15am-10:30am	Break	Break	Hotel
10:30am-11:30am	Signal Processing Society	PACE (Professional Activities Committees for Engineers)	
11:30am-12:30pm	Lunch	Lunch	Hotel
12:30pm-1:30pm	Signal Processing Society	WIE (Women in Engineering)	
1:30pm-2:30pm	Communications Society	WIE (Women in Engineering)	
2:30pm-2:45pm	Break	Break	Hotel
2:45pm-3:45pm	Communications Society	GOLD (Graduates of Last Decade)	
3:45pm-4:45pm	Kevin Van-Fort Wayne	GOLD (Graduates of Last Decade)	

*Registration Fees:

IEEE Members = \$50 per day or \$80 for both days

Non IEEE Members = \$80 per day or \$140 for both days

Student Members = \$35 per day or \$60 for both days

Non IEEE Student = \$45 per day or \$70 for both days

* Anybody registering after Nov 1, 2013 mid night EDT would be charged +20%. In order to keep attendee' costs low, the Central Indiana Section has agreed to subsidize costs. Registration fee includes daily presentation materials, all meals (continental breakfast, morning break, lunch, and afternoon break)

Price for the exhibitors: \$250 (1 attendee + \$100 for each additional
Sponsorship opportunities are also available

Registration will soon be available at: <http://www.cis-ieee.org/>

Conference Confirmed Speakers***Communications Society***

Gongjun Yan, Ph.D.

Assistant Professor of Informatics

School of Science

Indiana University Kokomo

Title: Towards Providing Scalable and Robust Privacy in Vehicular Networks

Abstract: In vehicular networks, there is a strong correlation between a vehicle's identity and that of the driver. It follows that any effort to protect driver privacy must attempt to make the link between the two harder to detect. One of the most appealing solutions to hiding the identity of a vehicle is the use of pseudonyms, whereby each vehicle is issued one or several temporary identities (i.e. pseudonyms) that it uses to communicate with other vehicles and/or the roadside infrastructure. Due to the large number of vehicles on our roadways and city streets and of the sophistication of possible attacks, privacy protection must be both scalable and robust.

We are interested in a non-trivial improvement towards providing a scalable and robust solution to privacy protection in vehicular networks. To promote scalability and robustness we employ two strategies. First, we view vehicular networks as consisting of non-overlapping subnetworks, each local to a geographic area referred to as a cell. Depending on the topology and the nature of the area, these cells may be as large as few city blocks or, indeed, may comprise the entire downtown area of a small town. Each cell has a server that maintains a list of pseudonyms valid for use in the cell.

Instead of issuing pseudonyms to vehicles proactively, as virtually all existing schemes do, we issue pseudonyms only to those vehicles that request them.

We also model analytically the time-varying request for pseudonyms in a given cell. This is important for capacity planning purposes since it allows system managers to predict, by taking into account the time-varying attributes of the traffic, the probability that a given number of pseudonyms will be required at a certain time as well as the expected number of pseudonyms in use in a cell at a certain time. Empirical results obtained by detailed simulation confirmed the accuracy of our analytical predictions.

Consultants Network

Matt Schantz is an Intellectual Property Lawyer and IEEE member. Title and abstract of presentation will be confirmed in the next month.

John Layden is a supply chain velocity expert and owner of the Ancelus database product. Title and abstract of presentation will be confirmed in the next month.

Kevin VanZuilen: Chair IEEE- Fort Wayne Section
Failure Analysis and/or Counterfeit Component Detection

Any questions please contact David Koehler email: David.Koehler@ieee.org

New Senior Members

The CIS-IEEE has always looked to facilitate members advancing to higher levels of membership.
Congratulations to our newest senior members!

Niklas Elmqvist

Allen Garner

Tatyana Sizuk

David Yau



FIRST Robotics Teams Claim Coveted \$500 Sponsorships In Statewide Essay Contest



Three Indiana FRC Teams have earned \$500 Sponsorships in Central Indiana Section's Annual Essay Contest. The yearly contest garnered entries from Petersburg, to Huntington, and West Lafayette. The contest featured three first time entrants and one first time winner.

The FIRST Robotics Competition (FRC) challenges high school students to build a competitive robot during a six-week build season using a standard "kit of parts" and a common set of rules. The teams and robots then compete in games designed by Dean Kamen, Dr. Woodie Flowers, and a committee of engineers and professionals. (<http://www.usfirst.org>). FIRST Robotics Competition (FRC) is a unique varsity sport of the mind designed to inspire high-school-aged young people to explore careers in science, technology, mathematics and, engineering.

This year's essay challenged teams to identify a failure on their robot and describe how that failure was utilized to improve the overall operation of the robot.

The Winners

Team 234, Perry Meridian High School, Cyber Blue. A repeat winner and perennial entrant. Cyber Blue won the Crossroads Regional, in Terre Haute, where they also won the Industrial Design Award. They were a Finalist at the Boilermaker Regional, where they also won the Engineering Inspiration Award. Cyber Blue went on to compete in the FIRST Championship in St. Louis.

Team 447, Madison County High Schools, Team Roboto. A repeat winner and perennial entrant. Team Roboto was a Finalist at the Crossroads Regional, in Terre Haute, where they also earned a FIRST Dean's List Finalist Award and a Woodie Flowers Finalist Award. They went on to compete in the FIRST Championship in St. Louis.

Team 3494, Bloomington High School South, The Quadrangles. A third year team and first time entrant. The Quadrangles competed at the Crossroads Regional, in Terre Haute, and the Waterloo Regional, in Waterloo, Ontario, Canada.

Winning essays are reprinted in this issue of The Reporter.

Congratulations to our winners. Thank you to the judges for thoughtful vetting. See all of you for the 2014 contest.

IEEE Members wishing to know more about FIRST Robotics or who would like to participate in Essay Contest administration or judging should contact Brad Snodgrass at bsnodgrass@ieee.org.

Team Cyber Blue 234

Perry Meridian High School

Woody Allen once said, "If you're not failing every now and again, it's a sign you're not doing anything very innovative." Over the years, Cyber Blue has had countless designs evolve and adapt due to a problem or failure, thus leading to something unique and innovative. This year's build season is no exception! There is one design failure on our 2013 robot, we named our "disc flipping mechanism," that's failure led us to a totally different and creative design solution that we have incorporated into our final robot design.

The 2013 FRC game, "Ultimate Ascent," is similar to Ultimate Frisbee, where flying discs score points by being thrown or dropped into goals of different heights. We needed our robot to have the ability to collect discs by picking them up off the floor and lifting them to a shooter that could then score them in the top scoring goal. Realizing that not all discs on the floor would be right-side-up, we designed a "disc flipping mechanism" to flip discs over that were upside down when our robot picked them up off the floor. This design is best described as a hook-like mechanism, powered by a pneumatic cylinder. It was designed to fit under the conveyor that brought the discs into our robot. If a disc was picked up upside down, the "disc flipping mechanism" would raise up and flip it over so that the disc was right side up. This design was fairly successful when tested, but it caused problems because it was too large to fit in the space allocated inside the chassis. We modified the flipper design from a hook to an L-shape and experimented with several configurations of movement and placement within the chassis. Each design change solved one problem, but created another. While our "disc flipping mechanism" worked very well, its design was impractical for the dimensions of our robot. We underestimated the amount of space needed inside our robot to completely flip a disc over. Due to many other constraints, we simply did not have the space to allow this design to work.

Disappointed that our initial design would not be useful, we started brainstorming other ideas to tackle the disc flipping problem. One of our teammates raised the question: what if our robot could pick up and shoot discs that were either right side up or upside down? With that question in mind, we began redesigning our disc lift system to handle discs picked up in either orientation. After more brainstorming and prototyping, we arrived at a design that is one of the most unique designs in our team's history! The disc lift system we designed uses spiral coils from commercial vending machines to evenly lift discs of either orientation, moving them from our floor pick-up rollers to our shooter. When we imagined the parts needed for this design, someone commented, "You mean like the spiral pieces in vending machines?" Yes, exactly!! We then contacted a local vending machine distributor for help. After telling the company president about Cyber Blue and FIRST, he was excited to partner with us to help with this new design. He provided us with several sizes and lengths of vending machine coils to help as we tested our new design. Our final design uses three of these coils in a synchronized manner to evenly lift the discs up to our shooter. Not only did we solve our design problem, but we also gained a new Cyber Blue and FIRST supporter!

As we now work to fine-tune our shooter to accurately shoot discs in either orientation, we have also added a simplified solution to flip discs. A small bar extends from the robot's frame and pushes down on the surface of the upside down disc. The robot backs up and the downward, reversing pressure on the lip of the disc causes it to flip. We can then collect and shoot the disc in the upright orientation to shoot more accurately. As we perfect our shooting capability, we may no longer need this flipping device.

With many designs, there are flaws and failures we have encountered as a team. Through these obstacles this build season, we did not give up on our goal of successfully handling disc orientation. Our failed "disc flipping mechanism" led us to an innovative, effective robot design that we are proud of!

First Team Roboto 447

Anderson High School

This year, we at Team Roboto (447) are prepared to learn from our past mistakes. Last year was a good year for our team. We did much better than we had in previous years, but as always, we made some mistakes. We certainly intend to, and have, applied this knowledge gained from our mistakes in an effort to make this year's robot better. We had two major mistakes I would like to discuss in this essay.

Last year our chassis was very rigid and strong on the sides. We had an eight-wheel drive which was very powerful. This all seemed great although it led to a major problem. The front and back of the robot were nowhere near as strong as the rest of the robot. When we turned, the whole robot warped, rocked and skipped around. This actually caused damage to the chassis over time and on occasion made aiming for the goals very difficult. This year the robot is equally strong, or nearly-so, on all sides. So far we have avoided the previous problem.

The second mistake I want to talk about is a perfect representation of the saying “Don’t fix it if it isn’t broken”. The shooter for our robot last year consisted of two rotating PVC tubes that compressed the foam basketball and shot it out the front. We achieved around 98% accuracy with our shooter; even scoring highest in our first regional in Ohio. Seeing our success we decided that we wanted more. We thought about ways that we could get almost perfect accuracy. Someone came up with the idea of turning the shooter 180° so it faced backwards. The concept was that we could back into the target and then our shooter would be at the perfect distance. Most everyone on the team thought this was a great idea so we turned around the shooter. Big mistake; our accuracy dropped to around 50%. It also made aiming more difficult because when we were lining up shots we had to reverse the controls in our heads, which caused confusion.

This year we have a practice robot which we can use for testing out large game-changing modifications such as this. Nothing major will happen to the main robot before it is approved by testing with the practice robot. The practice robot also gives us opportunities for improving our code, driving skills, and design during the period that the main robot is not allowed to be worked on. We hope that this will give us a competitive edge this year. Overall our many mistakes in the past have led us up to this point. Inevitably we will make mistakes on this year's robot, but we see this as a good thing because we know what to improve upon next year.

Team Quadrangles 3494

Bloomington High School South

Many of the items we use daily and take for granted were invented through mistakes and accidents. Alexander Fleming created Penicillin when he left for a vacation and left his workstation unclean. Mistakes have also shaped our future. Wilson Greatbatch invented the pacemaker when he grabbed a 1 megaohm resistor instead of a 10,000 ohm resistor; his circuit pulsed every second like a heart. Many mistakes teach new lessons of avoidance or lead to better innovations; our “lesson learned” was as small as simply cleaning up circuits and wiring.

Our 2011 FRC robot was severely bogged down by unorganized wires; we avoided the same mistake on our 2012 robot and that had a profound effect on maintenance duties. Having learned the important lesson of organization, we put a lot of consideration into the circuitry design on our 2012 robot. The design for our 2012 robot focused additionally on having a clear view to its interior structure. Now the cRIO is in clear view when the panel is removed. This allows our programmer to easily deploy new codes. The Digital Sidecar is now located on the side of the robot behind a panel for easier circuit adjustments and to facilitate quick checks of PWM cables. Such organization gives us an ease of access. The robot can now be easily opened for a quick procedural check-up before each match to prevent obvious failures. This procedural rundown couldn't be done on our 2011 robot because access was difficult.

Maintenance was a big issue on our 2011 robot because running a mechanical diagnosis proved to be a challenge. Because of the ease of access on our 2012 robot, its core could be instantly accessed for quick maintenance. Now that maintenance was no longer a big issue like it had been in 2011, our team had more time to focus on other aspects of FIRST Robotics such as scouting possible alliance teams or talking about new game strategies. Such organization has also displayed professionalism and made our robot look more desirable and interesting to the other teams especially those seeking possible alliance partners.

Although our 2012 robot did not win nationals or regionals, we did learn the benefits of having a design targeting both function and internal order. This is something we'll continue to think about when we begin the design phase of a robot. We intend to share this important lesson with rookie teams, as we had made this mistake in our rookie year.



PES/IAS/PELS News

Earl Hill, Chair, PES/IAS/PELS
Ben Huckaba, Vice-Chair, PES/IAS/PELS

The PES/IAS/PELS has remained active this spring. In March the section held a Battery Short Course taught by representative from both academia and industry vendors. Each session was well attended, with specific dates, speakers and topics listed below.

March 12th

John Mandeville, American Electric Power (AEP), Dolan Labs (Columbus, OH)

AEP has been proactive in using batteries for energy storage and other benefits. The presentation will review the benefits and operational issues associated with Sodium Sulfur (NAS) battery and Lithium ION battery installations.

March 19th

Dr. Kim, Assistant Professor of Mechanical Engineering at IUPUI

Battery technology research and development

March 26

Steve Tolen of Indy Power

Randy Brantley of Delphi

Presenting advances in battery technology for commercial applications.

June 4th (Rescheduled from March 5th)

Charles (Chuck) LaSota, President/CEO of the Battery Innovation Center (BIC)

Research focused on delivering new high capacity energy storage systems for vehicle and energy grid uses.

In April the section toured the Purdue University Smart Meter Integration Lab (SMIL) and Power Electronics Development and Application Lab (PEDAL). Dr. N. Athula Kulatunga hosted the tour, explaining the mission of the SMIL is to promote innovations around smart metering devices to increase efficiency of electric power grid and reduce per capita electric power consumption by integrating modern power electronics, communication technologies, and consumer behavior findings. The mission of PEDAL is to promote integrated, energy efficient power electronics based solutions to all possible applications and to educate students and instructors. More information about each lab is available at: Smart Meter Integration Lab (SMIL) <http://www.tech.purdue.edu/ECET/SMIL> and Power Electronics Development and Application Lab (PEDAL) <http://www.tech.purdue.edu/ECET/PEDAL/>

May PES_IAS_PELS Meeting

The CIS-IEEE PES/IAS/PESL held its first significant meeting in the nuclear power area on May 21st. The speaker was Jeff Snow, from the Mount Vernon office of Babcock and Wilcox. Mr. Snow is the Project Manager, Commercial Heavy Components and Integrated Manufacturing Team Leader, mPowerTM Development. He spoke on advances in small modular nuclear reactors (SMR). These are smaller, more financially manageable advanced nuclear reactors, based on proven designs already in use. The key advantages of the SMR include the following:

- Lack of emissions, including greenhouse gases
- Minimal impact on the environment (small amounts of uranium used as fuel)
- Small design enables companies to build reactors in manageable way, rather than “betting the company” on one large reactor.

The reactor features a four-year operating cycle without the need for refueling, and is designed to produce clean, zero-emission operations. Generating capacity can be added in 180 MW increments to match customers’ load growth projections.

B&W subsidiary Babcock & Wilcox mPower, Inc. will lead the development, licensing and delivery of B&W mPower reactor projects.

Features of the B&W mPower reactor include:

- *Integral nuclear system design
- *Passive safety systems
- *Underground containment
- *Four-year operating cycle between refueling
- *Scalable, modular design is flexible for local needs
- *Multi-unit (1 to 10+) plant
- *Less than five percent enriched uranium
- *North American shop-manufactured

The modular and scalable design of the B&W mPower reactor will meet the generation needs of customers with the proven performance of existing light water reactor technology. Several reactor modules can be installed to support the customer requirements and infrastructure constraints.

The B&W mPower reactor will reduce risks associated with deploying nuclear power and become a flexible, cost-effective solution to the U.S. energy needs while lowering greenhouse gas emissions. Each B&W mPower reactor brought online will contribute to the reduction of approximately 57 million metric tons of carbon dioxide emissions, compared to those created by other forms of energy generation, over the life of the reactor.

The B&W organization offers production capabilities to supply all Nuclear Steam Supply System (NSSS) components, reducing manufacturing costs and streamlining construction.

B&W has already received significant funding for the SMR from the US Department of Energy, and from the Tennessee Valley Authority (TVA), which has already selected a site for building the reactor (provided TVA purchases a unit).

The meeting was also an opportunity for the CIS to promote itself, in that two legislators attended: Christina Hale (D-87), and Terry Austin (D-36). Both came away much better informed on this topic.

Annual Central Indiana Section Baseball Outing

Indianapolis Indians vs. Syracuse Chiefs

Sunday, July 28, 2013, 1:35pm

Victory Field, Indianapolis

1st Base Suite Level Party Terrace

Join us on Sunday, July 28th for our annual social outing to meet your fellow IEEE members and enjoy a beautiful afternoon at Victory Field in Indianapolis. The VIP Party Terrace is a wonderful place to watch your Indianapolis Indians play and still mingle and talk with your colleagues and families. If you didn't come last year, you will want to make special plans to come this year!! We have kept the same great prices as the last few years to encourage everyone to come; \$20 for members and guests, \$10 per child (age 2 and under are free), and \$10 for student members. This includes a catered lunch beginning at about 12:30pm with food and drinks available throughout the game including beer for the adults. The gates open at noon and the game starts at 1:35pm. The Terrace is covered so it will be breezy and delightful regardless of sun or rain.

Registration coming soon at: <http://www.cis-ieee.org>

Special!! The first ten GOLD members to register will get their first adult ticket for only \$10.

In addition, again this year we will be holding a "**Senior Rodeo**" event during the game. This event provides eligible IEEE members with computers, references, and help in completing the online application for IEEE Senior Membership Grade. Please review the eligibility requirements at

http://www.ieee.org/membership_services/membership/senior/index.html, then register at <http://www.cis-ieee.org> (coming soon), and finally bring a current resume and your IEEE member number to participate in the "Senior Rodeo" event.

I look forward to seeing you all at the game!!

-Phil Walter
Director, Central Indiana Section-IEEE



Views of Previous Baseball Outings

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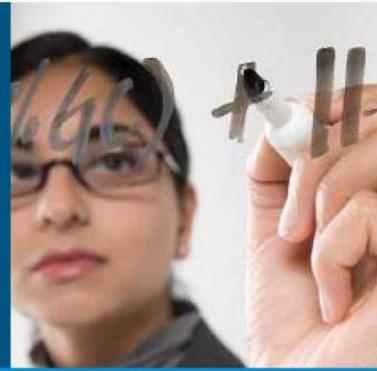
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Calling IEEE Members in Region 4 East Area, Chicago and Calumet



Register Today!

<http://www.cvent.com/d/9cqbgb/1Q>

Date:

Friday, June 21 2013 and Saturday, June 22 2013

Location:

Detroit Marriott at the Renaissance Center
Detroit, Michigan

Organized Jointly By:

IEEE Educational Activities Board and IEEE Southeast Michigan Section

Registration Deadline

Friday, June 7

Questions

Email: l.bowlby@ieee.org

The event is free of charge for IEEE members.

IEEE will reimburse all reasonable travel-related expenses following the workshop.

Travel-related expenses include up to a one night hotel stay and transportation to and from the workshop location.

To learn more about IEEE TISP, visit:
www.ieee.org/go/tisp

- Do you want to help pre-university school teachers in your local area motivate their students to learn engineering and technology in the classroom?
- Are you interested in improving the exposure of pre-university students in your local area to engineering and technology through a fun, hands-on learning program?
- Are you passionate about sharing your knowledge to help influence future engineers?

Then, you should register and attend the:

IEEE Teacher In-Service Program (TISP) Training Workshop in Region 4 East Area, Chicago and Calumet

In this free, 1½ day workshop, IEEE Members will:

- ✓ Learn how to provide training to local pre-university school teachers on the use of engineering & engineering design lesson plans and hands-on activities in the classroom
- ✓ Learn how the lesson plans may be aligned to education standards
- ✓ Learn the challenges and opportunities that exist in local pre-university schools
- ✓ Learn how to develop a partnership with local pre-university school systems
- ✓ Have the opportunity to network with other engineers and local educators

Workshop Agenda

Friday, June 21

4:30pm – 7:00pm—Workshop Session
7:00pm – 9:00pm—Networking and Dinner

Saturday, June 22

8:00am – 9:00am—Continental Breakfast
9:00am – 4:00pm—Workshop Session

Register Today!

<http://www.cvent.com/d/9cqbgb/1Q>



About IEEE TISP

The IEEE Teacher In-Service Program (TISP) provides a forum for IEEE volunteers to demonstrate the application of engineering, science and technology concepts by sharing their real-world experiences with local pre-university (K-12) teachers.

The TISP workshop uses a train-the-trainer model which empowers IEEE volunteers to be able to conduct professional development presentations aimed at helping teachers bring exciting hands-on engineering lessons into their classrooms. These lessons support the teaching of science, mathematics, engineering and technology and can be integrated in classroom instruction. Once trained, IEEE volunteers can connect with pre-university schools in their local communities to deliver the program.

The program's goals are to:

- Empower section volunteers to collaborate with their local pre-university community
- Promote applied inquiry-based learning
- Enhance the level of technological literacy of pre-university teachers
- Encourage pre-university students to pursue careers in engineering

During a TISP training workshop participants will:

- Learn tips and strategies on how to connect with local teachers
- Participate in inquiry-based hands-on activities
- Hear from key local educators
- Receive resources for conducting teacher in-service presentations

2013 Meeting Calendar

Date	Host	Subject	Location
Monthly	CIS	Executive Committee Meeting Annual Planning Meeting	ET103, IUPUI Internet/Phone Bridge
... Check the Section web page for details and current information. 			

ADVERTISER EVENT

TBD	DLS http://dlsemc.com/	See Advertisement on Page 8	TBD
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How Do You Communicate??

Want to know what is happening in Central Indiana Section? Don't know where to look? Already inundated with E-Notices? Need to ask a question? Want to find an expert? Got a meeting idea?

Here are some of many communication channels available in Central Indiana Section



Find the Central Indiana Engineering Consultants' Network and the Central Indiana Section Communications Society, as well as several other IEEE related organizations on LinkedIn.



Student Branch members are encouraged to join "CIS-IEEE Student Branches" group on Facebook. Several opportunities for students and student branches have been posted there. The Facebook group also provides an opportunity for CIS student members to interact or to make contact with student members outside of Central Indiana. There is no substitute for a good network, but be aware that some hiring managers are also checking these sites.

Communications Society members can find "COMSOC – Central Indiana Section" on Facebook.

CIS Home Pages

Start with the main site. (www.cis-ieee.org) Check out the calendar of events, or link to the many IEEE groups in Central Indiana Section, including all of the Student Branches.

Not getting E-Notices? E-Notices are not only a resource for keeping in touch with the activities throughout CIS, but you will also receive information on topics of interest throughout IEEE

E-Notices

Login to myIEEE from the IEEE Home Page (www.ieee.org) and sign-up! at the main site. (www.cis-ieee.org) Check out the calendar of events,

Central Indiana Engineering Web Links

ACEC	American Council of Engineering Companies, Indiana	acecindiana.org
ASCE	American Society of Civil Engineers	inasce.org
ASME	American Society of Mechanical Engineers	sections.asme.org/central_indiana
ASM-INDY	American Society for Metals - Indianapolis	asm-indy.org
CIECN	Central Indiana Engineering Consultants' Network	indy-engineer.dnsalias.com
CINLUG	Central Indiana Linux Users Group	cinlug.org
IBEN	Indiana Biomedical Entrepreneur Network	indianabionetwork.org
IHF	Indiana Health Industry Forum	ihif.org
INCOSE	International Council on Systems Engineering	incose-coa.org
INDSPE	Indiana Society of Professional Engineers	indspe.org
INDYASHRAE	American Society of Heating, Refrigeration, and Air Conditioning Engineers	indyashrae.org
NSBE-IAE	National Society of Black Engineers - Indianapolis Alumni Extension	nsbe-iae.org
PIMCIC	Project Management Institute - Central Indiana Chapter	pmicic.org
SAE	Society of Automotive Engineers, Indianapolis	indianasae.org
Scientech	Scientech Club in Indianapolis	scientechclub.org
SIM	Indianapolis Chapter of Society for Information Management (SIM)	SimNet.org
SWE-CI	Society of Women Engineers - Central Indiana Section	swe-ci.com
Techpoint	A diverse collection of technology-based Indiana industries.	Techpoint.org

Distribution: The Reporter is made available electronically to the approximately 1800 IEEE members within the Central Indiana Section including student members and faculty of Purdue, IUPUI, Rose-Hulman Institute of Technology and ITT Technical Institute.

Central Indiana Section Active Volunteers		
Director (1st Year)	(812) 223-6520	
Vacant	Phil.Walter@ieee.org	
Director (2nd Year)		(317) 838-2268
Phil Walter		b.evanich@ieee.org
Chair	(317) 441-2076	(317) 340-5905
David Koehler	David.Koehler@ieee.org	dcvasque@ieee.org
Vice Chair		
Vacant		
Treasurer	(317)-230-6287	(812) 237-3399
Tim Alt	tim.alt@ieee.org	lin.yuetong@gmail.com
Secretary	(812) 337-4809	(317) 845-5050
Stavan Dholakia	stavandholakia@ieee.org	mnpn@juno.com
Power & Energy/ Industry Applications Societies	(317) 726-1236	(317) 679-6194
Earl Hill	eshill@loma-consulting.com	bsnodgrass@ieee.org
Power Electronics Society	317-441-1389	
Tim Alt	tim.alt@ieee.org	
Computer Society	(317) 888-0611	
Joseph Benek	joseph.benek@wicor.com	
Signal Processing Society	(765) 494-3538	
Mimi Boutin	mboutin@ecn.purdue.edu	
Engineering in Medicine and Biology Society		
Jake Chen	(317) 278-7604 jakechen@iupui.edu	
Communications Society	(812) 237-3451	
Xiaolong Li	Xiaolong.LI@indstate.edu	
Central Indiana Engineering Consultants' Network (CIECN)	(317) 679-6194	
Brad Snodgrass	bsnodgrass@ieee.org	
Membership Development	(317) 726-1236	
Earl Hill	eshill@loma-consulting.com	
Professional Activities (PACE)		
Vacant		
Newsletter Editor	(765) 494-7491	
Helen McNally	mcnallyh@purdue.edu	
Communications Information Officer		
Vacant		

Central Indiana Section Active Volunteers (cont'd)		
Finance Committee		
Vacant		
Webmaster	(317) 838-2268	
Bob Evanich		b.evanich@ieee.org
GOLD Chair	(317) 340-5905	
Diana Vasquez		dcvasque@ieee.org
Constitution and Bylaws	(812) 237-3399	
Yuetong Lin		lin.yuetong@gmail.com
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Marvin Needler		mnpn@juno.com
Pre-University/Student Affairs	(317) 679-6194	
Brad Snodgrass		bsnodgrass@ieee.org
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Yao-Bin Chen		ychen@iupui.edu
ITT Tech Student Branch CIS-IEEE Representative		
Mohammed Boudaia		MBoudaia@itt-tech.edu
Rose - Hulman Institute of Technology Student Branch		
Keith Hoover		heath.e.hoover@rose-hulman.edu
Purdue University Student Branch		
Chih-Chun Wang		chihw@purdue.edu
Editorial Policies		

Each issue of The Reporter typically references three months - the month in which it is published and the following two months. The Reporter is typically published in March, June, September, and December.

Material to be included should be submitted mid-month prior to the month it is to be published. For example, material intended for the September issue should be submitted to the Editor by August 15. The Editor will send a reminder to all IEEE Central Indiana Section entities by the 15th of the month to submit their updates.

Copy should be submitted electronically. Photographs are desirable. Advertisements are welcome. Contact the editor for layout sizes and rates.