



PITT | SWANSON
ENGINEERING



University of Pittsburgh IEEE Student Chapter Newsletter

February 2018



Connect with Pitt IEEE!

Email: ssoeieeee@gmail.com

Facebook: <https://www.facebook.com/PittIEEE>

Slack: <https://pittieeee.slack.com/>

Website: <http://www.pitt.edu/~ssoeieeee/>

Game Night - February 2nd

Enjoy an evening of board games, food, and fun! Feel free to bring your favorite game to share or learn a new one with your fellow ECE students on **February 2nd at 7:30 PM in Benedum G30.**

GBM #2 - February 13th

Join us for free pizza on **February 13th at 8:00 PM in Benedum G30.**

Smash Tournament - February 23rd

Do you know how to wavedash? Whether you're a newbie or a professional, join us for a Super Smash Bros. tournament on **February 23rd**. More information will be coming soon. If you aren't feeling up to the challenge, we will play casual matches as well. Snacks will be provided!

Upcoming: Lunch with Professors

We are working with faculty to reschedule this exciting opportunity to interact with ECE professors and students in a casual setting. Keep an eye out for more details about this FREE lunch! **Faculty: email Dr. Dickerson (dickerson@pitt.edu) and cc us (ssoeieeee@gmail.com) if you are interested in joining us!**

Ongoing: Mentorship Program

If you are new to ECE and want to learn more about opportunities or find a study buddy, join our mentorship program. If you are an upperclassman, this is the place to share your wisdom! The mentorship program is a great way to expand your Pitt network. **For more information, email ssoeieeee@gmail.com.**

Professor Spotlight

Dr. Natasa Miskov-Zivanov

Where did she receive her education, and why did she choose engineering?

Dr. Natasa Miskov-Zivanov is an assistant professor in the ECE department at the University of Pittsburgh. She began her studies in Serbia at the University of Novi Sad. She explains that she chose to study engineering due to a lifelong appreciation for mathematics. “Since elementary school, I loved math, and I went to math competitions. I went to a high school that specializes in math,” she says. Drawing on this strong background in mathematics, she decided to explore engineering. “My major was more towards programming and computer science,” she says,

“but we did all of this electronics, communication theory, digital circuit design in my undergrad too.” She particularly likes the theoretical part of engineering, which she believes combines “what I really like, which is math, with a more practical side of engineering.” She went on to receive her PhD in Electrical and Computer Engineering at Carnegie Mellon University and then completed her post-doctoral work at Pitt.



What does she like most about being a professor?

“I love the freedom of academia,” says Dr. Miskov-Zivanov. “I love to choose my projects, to see what really interests me, and go with that—explore.” While she acknowledges that academia might be in many ways a longer and harder path than industry, she finds it very rewarding. In addition to teaching classes and doing research, she advises a diverse group of PhD students, and she enjoys helping to guide them through difficult career decisions. About her advisees, she says, “Each student has a different personality—a different approach you have to take as a mentor to really get the best of of the student... they are working towards their PhDs, and it’s a big part of their career, and the role of a mentor is really important.”

What perspective does she have regarding women in engineering?

Dr. Miskov-Zivanov is one of very few female members of the ECE faculty at Pitt. Like many women in STEM fields, she is used to being among the minority. “When I was in this

specialized high school, there were 20 of us, and I think there were four girls... and then you go to ECE and it's kind of a similar story." She finds it encouraging to see female students in the classroom. To her students, she says, "If any girls from ECE ever want to talk to me, I'm more than happy to talk to them."

What kind of research does she do?

Drawing on her knowledge of digital circuits, Dr. Miskov-Zivanov's research is a unique combination of electrical engineering and biology. She and her team of graduate students work with other experts such as doctors and biologists to model biological systems using the techniques she learned in engineering. "Having the knowledge we have in ECE and then going into biology is very interesting," she says. After taking courses in subjects such as computational biology during her graduate work, she realized that "circuit design methods could really nicely be used... to develop models and analyze biological systems." Her work is being used to guide medical experts toward potentially developing new treatments for diseases such as cancer.

What is iGEM?

Dr. Miskov-Zivanov is a mentor for Pitt's iGEM team. iGEM is an international synthetic biology competition that was started by MIT. Undergraduate students work in teams to design biological systems and then present their work at an annual competition. After starting an iGEM team at CMU earlier in her career, Dr. Miskov-Zivanov began a team here at Pitt as well. Recruitment for iGEM is beginning now, and she encourages ECE students to consider joining. "It's an amazing experience for undergrads," she says. "Every year I hardly see any ECE students. I would love to see ECE students participating because we have so much to give to these teams."

What advice does she have for undergraduate engineering students?

Dr. Miskov-Zivanov poses a single question to her students: "Ten years from now, where do you want to see yourself?" She believes that both industry and academia offer rewarding careers, but for each student, "it just depends what fits you." She also suggests that students try to keep the "big picture" in mind when attending classes. "Always think about it—why are they teaching me this? What is this useful for? We all forget that."

Pitt IEEE FAQs

What is IEEE?

IEEE is an international organization of professionals in the electrical and computer engineering industries. This has recently expanded to include related fields such as computer science. Members enjoy access to a wide array of journals and other subscriptions that provide news about the latest developments in industry. IEEE also provides networking opportunities for its members, career opportunities, and special sub-organizations for students, young professionals, and women in engineering.

How can I get involved with Pitt IEEE?

Pitt IEEE is our student chapter. We invite all students in electrical and computer engineering, as well as computer science, to join us. If you are interested in becoming involved, we encourage you to attend one of our General Body Meetings (GBMs). GBMs are the best place to find information about upcoming opportunities. However, you are welcome to come to our other events even if you have not been able to make it to a GBM. Any student who signs in at one of our events will be added to our mailing list. Interested students are also welcome to email us in order to subscribe.

How can Pitt IEEE benefit my university experience?

For any ECE student looking to make the most of his or her college experience, Pitt IEEE is the best place to begin. Our student chapter places a special focus on networking, both professionally and within our department. Our social events are the perfect place to get to know your fellow ECE students, find a future lab partner, and make new friends. We also host events involving faculty members and representatives from industry. These can be a great way to make connections both inside and outside of the Swanson School of Engineering.

Do I need a societal membership?

Pitt IEEE does not require students to have a societal IEEE membership in order to participate in GBMs, social events, or our workshops. However, we highly encourage our members to obtain a societal membership in order to benefit from what the wider IEEE community has to offer. Additionally, Pitt is hosting the annual Student Activities Conference in April, and students must have a societal membership in order to attend this particular conference. If you would like to become an official member of IEEE, check out

<https://www.ieee.org/index.html> and be sure to select a student membership!