

IMS2022 Project Connect: High-Impact Connections

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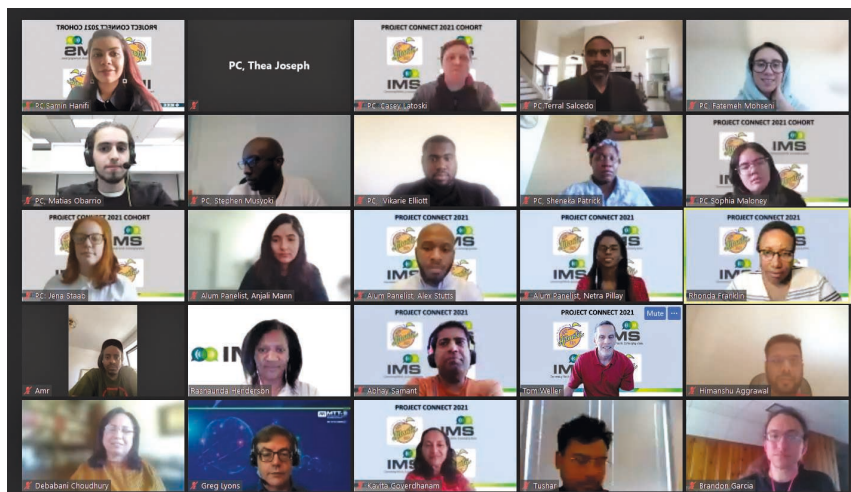


Figure 1. The IMS PC 2021 cohort and panelists.

posium (IMS) Project Connect (PC) is a program housed within the IMS that aims to increase the science, technology, engineering, and mathematics pipeline for underrepresented students in electrical and computer engineering (Figure 1). Since its beginning in 2014, more than 135 undergraduate and first-year graduate students from 41 universities have participated.

This year, the program plans to resume its normal in-person, four-day agenda that includes community building, professional development, and many opportunities to enjoy the technical events and industry exhibitions at the symposium. By all accounts, the most impactful benefit for student participants is

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Boot Camp in Boston (see Figures 1 and 2). RF Boot Camp has demonstrated each year to be a true testament to the quality and effectiveness of this valuable day of learning the fundamentals of RF and microwave theory.

The content and overall quality of RF Boot Camp continues to be refined and improved based on the positive feedback received from attendees over the years. Such feedback assisted in the offering of the added CEUs. The main feature of RF Boot Camp 2022 will be a series of tutorials, delivered by articulate experts from Keysight Technologies; Modelithics, Inc.; the University of South Florida; Oregon State University; and Analog Devices. The refreshed and updated topics for RF Boot Camp at IMS2022 include the following:

- the RFMW signal chain
- network characteristics, analysis, and measurement
- fundamentals of RF simulation



Figure 2. Participants listened attentively at IMS2019 RF Bootcamp in Boston.

- device modeling and impedance-matching basics
- spectral analysis and receiver technology
- signal generation
- modulation and vector signal analysis
- microwave antenna basics
- RFMW application focus: transmit/receive systems.

RF Boot Camp at IMS2022 will introduce a special session on an RFMW focus application to address the chal-

lenges of product development in the RFMW signal chain. Register today to attend IMS2022 in Denver, Colorado, for RF Boot Camp—or, if not for RF Boot Camp, then for some of the many other excellent IMS week technical and networking opportunities. Don't miss your chance to join us for a great day of refreshment in the basic microwave theory and terminologies that will be the talk of Denver during IMS week!



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the chance to develop their professional networks and meet wireless and microwave experts from across the globe. PC receives support from the IMS organizing committee, the National Science Foundation (NSF), and private donors.

With the support of the NSF, PC has conducted professional assessment on how well it is meeting its goals of increasing the students' knowledge of the RF/microwave industry, their awareness of career opportunities, and their interest in pursuing careers in the field. Each year, the survey results show that students strongly agree—averaging >4.5 on a 5-point Likert scale—that these goals have been met.

The results of an alumni survey conducted in 2021, which had a strong response rate of 27%, are even more telling: 94% of respondents strongly agree that PC is a valuable professional development experience, 55% maintain contact with their peers/fellow

participants, and 48% maintain contact with faculty mentors and program organizers. Here's an outcome that really stands out: 70% of respondents either had a job in the RF field or were pursuing a graduate degree in the RF field as their first new job or educational experience after participating in PC.

One alumnus remarked that "PC made me feel that there was a place for me in higher education. I felt that, with the right mentors, with people that are inclusive and really take an interest in my growth, I could excel in the field." We're also proud to say that two alumni are now helping to guide the future of PC as key members of its organizing committee.

The key to the success of PC continues to be strong support from the MTT-S community and IMS attendees. You might ask, "What can I do, especially if I don't/won't attend IMS this year?" You can personally invite a student from an underrepresented

group at your university or in your company internship program to apply for PC and be his or her reference. If you plan on attending the IMS conference, you can also attend the PC Industry Mixer on Wednesday and video presentations made by the students on Thursday afternoon.

It has been profound to hear the impact an unexpected conversation has had on PC students in the past. As another alumnus said, "Before attending PC, I was always shy to ask the questions I had in mind related to future career choices. The professional development program and the mixers organized by PC gave me the right training to be able to correctly pose questions. This not only boosted my confidence; it also opened a lot more opportunities that ended up being the career path I took." You can email imsprojectconnect@gmail.com for more information about how to help.

