Eclectic Engineering
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Many of us have been educated in traditional engineering studies, learning to solve complex problems in a limited field and hopefully learning how to learn about and solve issues in other fields in the course of doing this. Learning how to learn is the one skill that can serve us the rest of our life.

Some people can go through their whole career focusing on a single basic technology and/or application, but for most of us, we must be able to repurpose our prior experiences and learn new knowledge and skills to remain employable and to continue to be a valuable member of society. While our initial education likely trained us in electrical engineering, electronics, software, physics, materials science and other technical disciplines, in the long run, we will need to work in a wide variety of fields with requirements for hard technical skills as well as soft skills needed to be successful working with other people.

We need to be Eclectic Engineers, knowing enough about many things to play various roles to achieve successful in products and services that we are engaged in. To achieve the flexibility and skills we need to be successful we need connections that provide us with important information and knowledge and give us opportunities to learn and implement emerging technologies. In today's fast changing world, we must be Eclectic or we will become obsolete.

How can you learn what you need to know and make the connections that will keep you employable and satisfied with your contributions? We are social creatures and we can't do this alone. Valuable insights are often a combination of exposure, discussion and deep thought. We need to be part of communities that can give us the knowledge that we need and the opportunities to exercise and deepen this knowledge.

Work can give us a lot of the society and direction we need to be successful, but it is not enough to enable long-term accomplishment. We will likely not work for one company or even on one technology all of our careers. The folks we meet for work are an important part of our social and learning network, but we need more.

Being a member of an organization that provides learning opportunities, exposure to new ideas and technologies and experiences working with other people, not working for your current employer, is a way that you can become an Eclectic Engineer, able to contribute with basic engineering and technical skills that translate from one field to another. This increases your value in the job market and gives you more options and work that you can do. The IEEE can and should be your path to becoming an Eclectic Engineer.