Speaker 1:

On the next episode of Big Ideas, Dr. Eddie Piner, a professor in the material science engineering and commercialization program discusses materials with intelligence that hold the tension to transform infrastructure, make sense of the massive amounts of data generated by quadrant society.

Speaker 2:

So when you talk about advancing the technology, where are we looking toward? I mean, what we have now is it's fascinating what we're able to do, where our homes know when we're home and what the temperature needs to be. And I mean that's just one example I think of my nest thermostat, right? Where do you envision or see this going down the road?

Dr. Eddie Piner:

There's a number of different ways it can go. One area of particular interest to me is instead of these networks, these massive ubiquitous, I'll call them passive sensors, meaning it's something that's collecting some sort of data and then either dumping it into a bigger database or going to some other hub, let's call it, and then eventually going to some place where it's then extracted and utilized. Why not embed some intelligence at that point of connection, if you will? And so instead of, again, we're talking billions and billions of gigabytes every minute of every day, just in the United States alone. Add some intelligence to that.

Dr. Eddie Piner:

So instead of just creating more and more data that we then got to go into and try to extract exactly what we need, why not have the sensor itself with some intelligence, and only send the data that's of importance and maybe keep the rest for future use. If someone wants it, then it can ask for it. Otherwise, don't put it somewhere where it's just growing this snowball over time and just making our lives, meaning the technologist who are trying to get in and make use of this, making it more and more difficult with every passing day.

Speaker 1:

To hear Dr. Piner's full interview. Listen to Big Ideas TXST episode three available now. Subscribe to experience more innovative thought provoking content from Texas State University.