

PROFESSOR: OK, very briefly, EyeSpot, a project we are doing in the Senseable City Lab. But let me tell you a couple of words about Senseable City Lab. It's a new research group here at MIT.

It's in between the Media Lab and Urban Studies and Planning. Well, what do we do there? What we do is look at this.

That's yesterday's wireless. That's Marconi's Cape Cod Station. Look at all of that steel, and engine, and the energy, and amount of effort, just to transmit a few bits of information across the Atlantic.

Now look at today's wireless. It's more like this. And you can actually transmit much more information using that. And what we're doing is rethink in a creative way the interface between people, mobile technology, and the city.

Now concerning EyeSpot, this project is based on the MIT campus. That's what you see there. So most of you are familiar with Boston and MIT.

And the interesting thing is that if you talk to anybody at MIT, they will tell you there is a big revolution happening. And this revolution is in the way people live and work. And it's brought by laptop computers and Wi-Fi.

So if you look at this, this is how people used to work here. And this is more like today. Now, this is a bit biased, as you see we could find the worst possible image of a computer room-- dull, boring, natural light. And this is a sunny day it's not like today.

But the thing is that there's a big change. And what we are trying to do with EyeSpot is try to define and see how the change is happening, and quantify this by allowing people to locate themselves, actually, with a few-meter accuracy using the Wi-Fi network. And so it's a unique case study that we are starting to monitor, where we got 20,000 people in the MIT campus, a big urban chunk, with 3,000 access points.

That's quite a bit. If you think that cities like Philadelphia actually are planning to cover all of the city with Wi-Fi in the next couple of years, and that's less than 3,000, less than the number we have of access points. This high density means that we can locate everybody with just a few-meters accuracy.

This is just a map with some of the access points. And actually, I'll show you the two maps for the project you'll see at the museum. Oops. The first type of map is a map that shows you, in real time, the activity going on the network, and how many people are working in different parts of the campus. So you get this type of map changing. You don't see very well here, but you'll see it better at the museum.

And the second map is this one. That's like the heartbeat of MIT. Now, what you see here is total activity going on on the campus in real time. And you see the past week.

So what you see here is all of MIT. And that's actually a standard day. You see people coming in, working 9:00 to 5:00, and then actually, students keeping on working quite late, even during IAP.

And then you've got a peak and a minimum at 6:00 AM. And then you've got the next day. It's interesting-- Friday, Saturday, and Sunday, when most of the 9:00 to 5:00 activity disappears, and actually, you've got just the remaining part of the curve happening, activity is slipping down on Friday evening-- people going out-- and on Sunday, when you're starting to panic again about Monday and the next week. And then there's another peak.

And then what you see here is you can do this in every room on the campus. And what you see here, for instance, is this actual room. And you see most of the week, it was pretty no activity.

And look at today. And today, you can get actually up to 25 users, which is the number of laptops-- I counted earlier today-- of people connected to the wireless internet here. And you see it here. That's today, Monday.

It will appear in a minute. Anyway, you'll see the demo at the-- yeah, here you see the spike, today's activity. And you'll see the demo at the museum.

Just a couple of things about, just to conclude-- another project we have is actually with a soccer team. Being Italian, I am very proud of this project. And it's with AC Milan. And here, we are tracking, actually, players with a couple of centimeter accuracy in real time, and then developing artificial intelligence algorithms in order to study their movement and optimize strategy. So we get this type of traces, and then analyze them.

And then, we've got a number of other projects really dealing with technology and space, how technology and space interface. This is funded through a Senseable City Consortium that's sort of bringing together the different, the key actors, being part of this revolution from network operators, hardware companies, urban hardware, and public administration. But that's it. I think if you'd like to have a chat, it will be at the museum. Thanks a lot.

AUDIENCE: Thank you very much.

[APPLAUSE]