

Dear Prof. Baccelli,

For choosing the topics, I'm more interested in the field IoT network security.

Following are the two topics that I want to go further.

**Preference 1:**

**Topic: The similarities and differences of security issues of IoT devices which connects to a public or a private network**

For this public or private network connecting, more I want to describe is that the home-based IoT devices and not home-based devices (like in office or university)

Last semester I wrote a small thesis about an IoT device, I chose my wireless printer at home. I found that the printers connect to a public port and a private port have actually different security issue. For that I had interests to search more but my main job was focus on my IoT device at home.

For that this time I want to search for something about this, not just limiting in printers, but the general devices which work in different environment.

**Preference 2:**

**Topic: The similarities and differences of security issues of different types of IOT. (CIoT, EIoT and IIoT)**

If my preference 1 is too narrow. I am also interested in security issues between different types of IoT devices. I see there is an article about the security and privacy of IIoT in your gitlab. Maybe this is also a direction that I can go further. But I'm a bit worried that this topic is too wide.

Last Lecture you mentioned you are quite interested in my bachelor thesis forbidden matrices, I couldn't explain it very well. I send the link of two articles which are the basics of this topic, if you have interests can still read them a bit.

1. Davenport-Schinzel theory of matrices. URL: <https://www.sciencedirect.com/science/article/pii/S0012365X92903168>
2. On 0–1 matrices and small excluded submatrices. URL: <https://www.sciencedirect.com/science/article/pii/S009731650500004X>