Doctor João Lourenço First Meeting **Francisco Maria Calisto**

ISR & INESC-ID
Prof. Dr. Jacinto Nascimento
Prof. Dr. Daniel Gonçalves

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Report

On February 24, 2017 (Friday) I went to the Hospital São José in Lisbon at 09:50 for a meeting with Doctor Joo Loureno at 10:00 in the morning as agreed by e-mail.

When I arrived at the Hospital, I encountered an organizational problem, because it was difficult for the information about my arrival to be properly communicated to the Doctor, and I had to send an SMS later to the doctor. In the answer to SMS the Doctor said to meet in the meeting room of Radiology so I immediately asked in the reception of the same area where this room was. They gave me the incomplete information so I had to ask another person in the hall. Arriving to the Doctor already with a delay of 15min due to all this, the same made ready to ask me to sit down and had the remaining 45min to deal with a problem on the phone.

I took advantage of this waiting time to understand the surrounding environment where the doctor works. In this case we had a large room with a meeting table in the middle and against the wall there were 6 monitors radiological diagnosis. The material seemed good and in good condition unlike the Hospital's infrastructure. I remember the monitors being Philips.

At approximately 11:00 am I then began to approach and get to know the doctor and future user of our interface, as well as future collaborator of the project. Dr. João Lourenço [1] specializes in Radiology and currently works at both Hospital São José and CUF Clinic in Belm and Hospital CUF in Torres Vedras. Essentially, and in an area of interest as a user, it uses a lot of RIS software to obtain patient information and PACS, in this case the Philips eSight program, for the rediologic diagnosis. The features you use most are annotations written on the image and change the various views (windows) of the screen. It also uses the functionality of "Reformations" that will have to be later analyzed by us, the researchers.

In explaining the subject was somewhat reluctant to the fact that the project in its interpretation does not bring any sense of scientific innovation. So I explained that a new form of diagnosis would be implemented with a machine-readable approach to clinicians. It was mentioned in the possible existence of two types of software already on the market, Computer-Aided Detection (CADe) and Computer-Aided Diagnosis (CADx) [2]. The former has an integrated implementation with machine learning so we have to keep this in mind in the future.

Finally, the Doctor emphasized that the features that may be most interesting here may be the annotations and the measurements. In the end the meeting lasted about 1h, finishing at 12:00.

References

[1] Dr. João Lourenço. *CUF Belém Clínica*. Lisbon, Portugal (EU). Available from World Wide Web: (https://www.saudecuf.pt/belem/encontre-um-medico/joao-lourenco).

[2] Computer-aided diagnosis. *Wikipedia*. Available from World Wide Web: (https://en.wikipedia.org/wiki/Computer-aided_diagnosis).