Project: Trusted Electronic Systems

Advisor: Dr. Geiger & Dr. Chen

Members: Fatema Aftab (Team Leader), Yitao Liu (Key Concept Holder), Qian Chang (Communications Leader) Chao Huang (Communications Leader), Colton Bachman (Webmaster), Xin Hu (Webmaster)

Weekly Summary

In this week, we mainly talked about Hardware Trojan classification, and we make a decision about what kind of Trojan we need to make. We also made a plan for this project. We have 2 people work on hardware Trojan design, and 2 people work on FPGA Trojan, and 2 people response for Trojan detection and data analysis. After meeting, we started to follow the plan and working on Trojans. Also, we need to prepare for IC design.

Pending Issue

1. Project plan
2. Trojan manufacture, and circuits design.

Plans for next week

For next week, we need to start to work on our plan. Everyone already have missions to achieve. We need to start our rough plan for IC design, also, we need to begin our research on Trojan manufacture and start trying to make it on both IC and FPGA. Then we need to figure out how to simulate the IC. Besides that, we need to make power point for each person, with our problem and our work in it.

Personal Contribution

Xin Hu:

Working on how to implement hardware Trojan into FPGA board, and also reviewing verilog coding for design hardware Trojan. Spend almost 3 hours for it. This document described how to change the system vhd file to design the hardware Trojan. For more detail, I will keep studying it.

Chao Huang:

5 Hrs on FPGA Trojan design.

Qian Chang :

Work on the designing of hardware Trojan, and make it close to FPGA Trojan.

Fatema Aftab

Worked 5 hours reading and designing hardware Trojan on FPGA

Colton Bachman

Spent about 3.5 hours researching the different classifications of hardware Trojans. Then after our meeting on Tuesday I spent some time looking at hardware Trojans that use FPGAs. Xin and I will be working on that Trojan, so we will probably have the Trojan activate when certain keys are pressed. I have also spent time looking at how Trojans are detected so we can make our Trojan undetectable.

Yitao Liu

Name	Weekly hours	Cumulative hours
Chao Huang	5hrs	25hrs
Qian Chang	5hrs	25hrs
Fatema Aftab	5hrs	26hrs
Xin Hu	5hrs	27hrs
Colton Bachman	3.5hrs	23.5hrs
Yitao Liu	3hrs	22hrs