

Team sdmay22-14

Project Title: RISC-V SoC Hardware Vulnerability Detection Toolset

Date: 10/10/2021

Members:

- Mason Korkowski -
- Micah Mundy -
- Gerald Edeh -
- Kolton Keller -
- Eva Kohl -
- Savva Zeglin -
- Magnus Anderson -

What we've accomplished in the past week/what we've been researching

- Mason Korkowski - This past week I started initial work on simulating the new 2021 SoC design. I set up a personal VM and cloned the repo, I also started looking through the RTL design creating a high level dependency diagram starting from the top level design file.
- Micah Mundy - Got a VM set up with Ubuntu in order to start simulating the Hack@Dac 2018 SoC
- Gerald Edeh - Completed Personnel effort requirements for the project plan and continue to research about the hackadac and look for differences between the 2018 and 2021 competition.
- Kolton Keller - Created properties list for bug finding / tool development in order to make the path clearer moving forward with the project.
- Eva Kohl - Worked on and finished the gantt chart for the team project plan. Continued to research and read the specification for the hackadac 2021 competition.
- Savva Zeglin - Developed properties for bug finding and tool development
- Magnus Anderson - Worked on the risk mitigation section in the project plan. Met with Micah and learned how to access the Ubuntu VM we have access to as a group.

What we're planning to do in the coming week

- Mason Korkowski - I want to finish my work on the dependency diagram and start working on a tool that will automatically parse and create this from the design. This prototype will be very simple but useful while looking at different linked modules.

- Micah Mundy - Finish getting the VM set up for simulation. Begin work on getting the Hack@Dac 2021 SoC simulated
- Gerald Edeh - Ask some questions about the simulations with the team on how it works. In addition, continue to find out why some files were not found even though the document says to look at the specific file.
- Kolton Keller - Get feedback / criticism on bug properties spreadsheet. Refine the classifications
- Eva Kohl - Planning on working on the simulation of SoC on VM. Going to be asking questions and finding out how to better contribute to team solutions.
- Savva Zeglin - Get feedback / criticism on bug properties spreadsheet. Refine bug classifications
- Magnus Anderson - Get the environment set up for the 2021 competition with the new toolchain.

Issues we had in the previous week

- Mason Korkowski - Minor issues setting up a personal VM. We resolved this by getting a VM set up on the ISU server so that now the whole team has access.
- Micah Mundy - Could not get Questasim on VM.
- Gerald Edeh - Some bugs were not showing up, and it was difficult to gauge how long each task would take since we are at the beginning of development
- Kolton Keller - Some bugs were hard to find properties for / to determine what type of tool is best to use.
- Eva Kohl - Working on the gantt chart was a little tricky in not knowing how long items will take and deciding what amount of time is a reasonable allotment.
- Savva Zeglin - When classifying bugs and working on properties, some bugs will not be fully understood until we can simulate them. Some bugs are also difficult to understand without looking at the full source code in context.
- Magnus Anderson - None