

Name: Bohdan Ivchenko

Project Title: Research and Development (R&D) Intern

Company: Ansys

Industry Sponsor: Sudarshan Mallu

497 Instructor: Monika Sobolewska

This past 15 weeks, I have been working as an R&D Intern at Ansys in Austin, Texas, on the RedHawk-SC Team. Ansys builds simulation tools for engineers and I was working on a simulator for dynamic voltage drop and other issues related to the chip technology. I was assigned five projects ranging from fixing bugs to creating or modifying APIs (Application Programming Interfaces) or internal tools. I was able to learn a lot about the software engineering trade, primarily using Git, BitBucket, Jenkins, Python (headers, namespaces, iterators, modules), and how to expose C++ classes with Python. I also learned a lot about C++ namespaces and serialization and how to navigate internal code, use emacs and other tools to debug problems, and use the internal distributed computing framework called SeaScape. I also learned how to participate in internal processes like UI review, project requirements and specifications gathering and implementation, and documentation in general. I improved my soft skills, which allowed me to make many valuable connections. This internship was an excellent opportunity to learn essential skills that will make me a competitive candidate in the technology field.