Abstract: A Decompiler is a program which takes in input an executable and tries to produce the source code that generated it. In this talk we give an overview of the decompilation process, highlighting the challenges and sketching the general structure of a decompiler. Then, we compare strengths and weaknesses of the currently available ones. Finally, we consider currently open issues and interesting research directions.

Short bio: Luca Demetrio has studied Computer Science at the University of Genova. He is a PhD student at DIBRIS and member of the Computer Security Laboratory (CSECLab, https://csec.it). His current research interests are focused on binary analysis, with a strong emphasis on decompilation, exploitation and malware analysis. He is also a member of ZenHack (http://zenhack.team), which is an academic hacking team participating in Capture-The-Flag (CTF) events.