



# Department of Computer Science

## A Journey Through Android App Analysis: Solutions and Open Challenges

Prof. Dr. Jacques Klein  
University of Luxembourg

**Hosted by Martin Kellogg**

**Date:** Friday, February 17, 2023

**Coffee:** 2:15 PM – 2:30 PM

**Time:** 2:30 PM – 3:30 PM

**Location:** GITC 4402 (4<sup>th</sup> floor Seminar Lecture Hall)

**WebEx Link:** <https://njit.webex.com/njit/j.php?MTID=mb52d4ec6ba0266b1fb5e356848da4a36>

<http://cs.njit.edu/seminars>

### **Abstract:**

Abstract: Users can today download a wide variety of apps ranging from simple toy games to sophisticated business-critical apps. They rely on these apps daily to perform diverse tasks, some of them related to sensitive information such as their finance or health. Ensuring high-quality, reliable, and secure apps is thus key. In the TruX research group of the interdisciplinary center for Security, Reliability, and Trust (SnT) of the University of Luxembourg, we are working for about 10 years to deliver practical techniques, tools, and other artifacts (such as repositories) making the analysis of Android apps possible. In this talk, I will briefly introduce our key contributions in both (1) Android app static analysis to detect security issues, and (2) Android Malware Detection with machine learning. I will conclude by listing several open challenges that we are currently facing towards improving the analysis and security of Android apps.

### **Bio:**

Prof. Dr. Jacques Klein is a professor in software engineering and software security within the Interdisciplinary Centre for Security, Reliability and Trust (SnT) at the University of Luxembourg.

Prof. Klein co-leads a team named TruX of about 25 researchers developing innovative approaches and tools for helping the research and practice communities build trustworthy software.

Prof. Klein received a Ph.D. degree in Computer Science from the University of Rennes, France, in 2006. His main areas of expertise are threefold: (1) Software Security, (2) Software Reliability, and (3) Data Analytics.

Prof. Klein has published more than 150 papers, often in top venues such as ICSE, FSE, ASE, ISSTA, PLDI, etc. In addition to academic achievements, Prof. Klein also has a long-standing experience and expertise in successfully running industrial projects with several industrial partners in various domains by applying data analytics, software engineering, information retrieval, etc., to their research problems.