

Verifying Confidentiality in Web-Based Systems

ANDREI POPESCU

Abstract

I describe our experience with designing, implementing and verifying web-based systems that come with confidentiality guarantees. Our work includes a general framework for specifying and proving information flow properties in input/output automata, as well as two major case studies: CoCon, an EasyChair-like conference management system, and CoSMed, a social media platform. (The talk covers joint work with Thomas Bauereiss, Armando Pesenti Gritti, Sergey Grebenshchikov, Peter Lammich, Sudeep Kanav and Franco Raimondi.)

Andrei Popescu

Middlesex University London