Dr. Salil Vadhan "Differential privacy: from theory to practice and back"

Salil Vadhan

Harvard University

Host: Monika Henzinger

Since it was introduced in 2006 by theoretical computer scientists Dwork, McSherry, Nissim, and Smith, differential privacy has become the leading framework for ensuring that individual-level information is not leaked through statistical releases or machine learning models built from sensitive datasets. In addition to a rich theoretical literature, differential privacy has also started to make the transition to practice, with large-scale applications by the US Census Bureau and technology companies like Google, Apple, Microsoft, and Meta. After giving some of this background, I will describe OpenDP, a community effort to advance the practice of differential privacy that we have been building over the past few years. In particular, OpenDP is developing a trustworthy and open-source suite of differential privacy tools that can be easily adopted by custodians of sensitive data to make it available for research and exploration in the public interest. Finally, I will give a taste of some of the intriguing research questions that this effort to bring differential privacy to practice has raised.Bio: Salil Vadhan is the Vicky Joseph Professor of Computer Science and Applied Mathematics at the Harvard John A. Paulson School of Engineering & Applied Sciences, and Faculty Co-director of the OpenDP open-source software project. Vadhans research in theoretical computer science spans computational complexity, data privacy, and cryptography.His honors include a Simons Investigator Award, a Gdel Prize, a Harvard College Professorship, and a Guggenheim Fellowship.

Tuesday, April 16, 2024 02:00pm - 03:30pm

Raiffeisen Lecture Hall, Central Building

This invitation is valid as a ticket for the ISTA Shuttle from and to Heiligenstadt Station. Please find a schedule of the ISTA Shuttle on our webpage: https://ista.ac.at/en/campus/how-to-get-here/ The ISTA Shuttle bus is marked ISTA Shuttle (#142) and has the Institute Logo printed on the side.