

# CDMS Research Seminar

## Proofs of Storage and Applications

Friday, 10<sup>th</sup> June 2022, 11:00 am  
Parramatta South (EA.G.27) and Zoom

<https://uws.zoom.us/j/84575011899?pwd=YUIBT2lZb1FXTENCekd5dWx6aHdYQT09>

Speaker: Dr Sushmita Ruj, University of New South Wales

Abstract: Cloud service providers can be malicious and tamper with the data. Proofs of storage enable clients to verify data integrity. We will discuss the concept of proofs of storage and present some of our constructions. We will then discuss limitations of existing proofs of storage and show how blockchains can address these limitations. We will discuss applications of proofs of storage for secure, privacy preserving and accountable data sharing and trading.

Bio: Sushmita Ruj is Senior Lecturer at UNSW, Sydney. Before joining UNSW, she was a Senior Research Scientist at CSIRO's Data61, an Associate Professor at Indian Statistical Institute and an Assistant Professor at Indian Institute of Technology, IIT, Indore. She was a visiting researcher/faculty at NTU, Singapore, KDDI R&D Labs, Japan, INRIA, France, Kyushu University, Japan and intern at Microsoft Research Labs, India. She received her B.E. degree from Indian Institute of Engineering, Science and Technology (IIST), Shibpur, India and Masters and Ph.D. from Indian Statistical Institute, India, all in Computer Science. Her research interests are in applied cryptography, blockchains, cybersecurity and data privacy. Sushmita serves on the Editorial board of Elsevier Journal of Information Security and Applications (JISA) and Pervasive and Mobile Computing (PMC). She served as a Program Co-Chair for ACISP 2021 and Indocrypt 2019. She won best paper awards at ISPA 2007, IEEE PIMRC 2011 and IEEE ANTS WIE'17. She received Samsung GRO award, NetApp Faculty Fellowship, Cisco University Research Grant, OCSP grant from IBM Research. Sushmita is a Senior member of ACM and IEEE.

More details can be found on her Homepage: <https://research.unsw.edu.au/people/sushmita-ruj>

Rodrigo Calheiros is inviting you to a scheduled Zoom meeting.

Topic: CDMS Research Seminar: Proofs of Storage and Applications

Time: Jun 10, 2022 11:00 AM Canberra, Melbourne, Sydney

Join Zoom Meeting

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