



Government of Gujarat

Gujarat Technological University

(Accredited with A+ grade by NAAC)

Centre of Excellence in Blockchain Technology (A Government of Gujarat Funded Project)

LECTURE SERIES IN THE DOMAIN OF BLOCKCHAIN TECHNOLOGY

A Report on Lecture 2

Atomic Cross-Chain Exchanges of Shared Assets

(Date: 27th April, 2023)

The session was organized by GTU-Graduate School of Engineering and Technology under CoE in Blockchain Technology.

The resource person for this session was **Sh. Krishnasuri Narayanam** who is Senior Research Engineer & Manager of Sustainable Computing Research at IBM Research, India.

Learning Objectives

- To make the participants aware about blockchain interoperability.
- To provide insights of collaborative computation across blockchain networks.
- To make the participants aware about atomic cross-chain swap.
- To provide practical coverage of interoperation framework for atomic swap using HTLC.

Participants

Around 60 participants including PG students, research scholars, faculty members from different institutes across the state had participated and took advantage of this session.

Content covered

1.	Blockchain interoperability
2.	HTLC as a canonical solution for atomic swap
3.	Asset exchange with Shared Assets
4.	HTLC adaption for GAE
5.	Attacks on HTLC adaption for GAE
6.	Multi-party Hash Time Locked Contract (proposed solution)
7.	Implementation of Layers of DLT application model: Contracts & Applications
8.	Experimental evaluation of GAE implementation in Weaver



Coordinated and Planned by Executive Committee Members

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