Sanidhay Arora

DOCTORAL STUDENT

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Education

University of Oregon

DOCTORATE IN COMPUTER SCIENCE

International Institute of Information Technology, Hyderabad

BACHELOR OF TECHNOLOGY IN COMPUTER SCIENCE AND ENGINEERING

Skills

Research Blockchains – Decentralized Finance Security – Game Theory **Proficient** JavaScript – Python – Web3 – React – Solidity – C – C++ – Go – AWS

Experience _____

Department of Computer Science - U of O (Ripple Fellowship)

RESEARCH ASSISTANT

- Made a novel algorithm for Protocols for Loanable Funds secure from Oracle Manipulation Attacks [Accepted]
- Designing an undetectable wash trading mechanism on Decentralized Exchanges
- To design a detection algorithm for the novel wash trading mechanism

Department of Computer Science - U of O

TEACHING ASSISTANT

- CIS 122: Introduction to Programming and Problem Solving (Twice)
- CIT 383: Networking Fundamentals

Machine Learning Lab - IIIT Hyderabad

RESEARCH ASSISTANT

- Continuing Project: Building Blockchains for Tomorrow [Reports] (May 2020 July 2021)
- Designed a general and scalable framework for Layered-Blockchain-Consensus-Protocols [Publication]
- Made a Proof-of-Concept implementation of ASHWAChain using Go and Python [Publication]

Alphamu Software Technologies

SOFTWARE ENGINEERING INTERN

Developed and maintained a React Native-Django android application running on AWS

Publications

- Sanidhay Arora, Yingjiu Li, Yebo Feng, Jiahua Xu. "SecPLF : Secure Protocols for Loanable Funds against Oracle Manipulation Attacks". To appear in Proceedings of the 19th ACM ASIA Conference on Computer and Communications Security (ACM ASIACCS 2024).
- Anurag Jain, Sanidhay Arora, Sankarshan Damle, Sujit Gujar. "Tiramisu: Layering Consensus Protocols for Scalable and Secure Blockchains". In 2022 IEEE International Conference on Blockchain and Cryptocurrency (IEEE ICBC 2022).
- Sanidhay Arora; Anurag Jain; Sankarshan Damle; Sujit Gujar, "ASHWAChain: A Fast, Scalable and Strategy-proof Committee-based Blockchain Protocol". Workshop on Game Theory in Blockchain at the 16th Conference on Web and Internet Economics, 2020. (GTiB @ WINE 2020).

Achievements and Co-Curricular ____

- Reviewer for ACISP 2022 and IEEE TRel National swimmer • Recipient of Ripple Fellowship 2022
- JEE Mains Rank: 1138 JEE Advanced Rank: 3077 Codeforces rating: 1702

University of Oregon, Eugene

University of Oregon, Eugene

September 2021 - June 2022

September 2022 - Present

KCIS, IIIT Hyderabad

July 2021 - September 2021

T-Hub, Hyderabad

September 2019 - November 2019

Eugene, OR

Hyderabad, India

August 2017 - July 2021

September 2021 - Present