# Heinsamding Thou

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#### Education

Indian Institute of Technology, Bombay

PhD in Computer Science and Engineering

National Institute of Technology, Karnataka

M.Tech in Computer Science and Engineering

National Institute of Technology, Nagaland

B. Tech in Computer Science and Engineering

Jan 2022 - Present

Mumbai, India

July 2019 - June 2021

Karnataka, India

August 2014 - June 2018

Nagaland, India

#### Research Experience

#### Visual Feedback for audio conferencing applications

Dec, 2022 - Present

IIT Bombay

Mumbai, India

• Currently working on audio conferencing application which enhances user experience by giving visual feedback to the user in poor network conditions, which can also be extended for educational purposes under the guidance of Prof. Bhaskaran Raman (Professor, IIT Bombay, CSE)

#### Other Experience

## **Teaching Assistant**

Ian, 2022 - Present

IIT Bombay

Mumbai, India

- CS224M Computer Networks Minor (Jan 2022 Current) by Prof. Bhaskaran Raman
- CS348 Computer Networks (July 2024 Dec 2024) by Prof. Vinay Ribeiro
- CS378 Computer Networks Lab (July 2024 Dec 2024) by Prof. Vinay Ribeiro
- CS745 Principles of Data and System Security (Jan 2024 May 2024) by Prof. Virendra Singh
- CS224 Computer Networks (July 2023 Dec 2023) by Prof. Vinay Ribeiro
- CS224 Computer Networks (Jan 2023 May 2023) by Prof. Bhaskaran Raman
- CS224M Computer Networks Minor (July 2022 Dec 2022) by Prof. Vinay Ribeiro
- CS152/CS154 Abstractions and Paradigms for Programming (Jan 2022 June 2022) by Prof. Rushikesh K. Joshi

#### Teaching Assistant

Jan, 2021 – June, 2021

Karnataka, India

National Institute of Technology, Karnataka

- CS111 C Programming Lab (May 2021 June 2021)
- CS255 Operating System (Jan 2021 April 2021)

#### **Publications**

1. Thou, Heinsamding, et al. "Visual Feedback Interface for Audio Communication Over Lossy and High Delay Networks." Indian Conference on Human-Computer Interaction Design and Research. Cham: Springer Nature Switzerland, 2024.

## 1. Visual Feedback Interface for Audio Communication Over Lossy and High Delay Networks

Indian Institute of Technology, Bombay

Guide - Dr. Bhaskaran Raman, CSE, IITB

## 2. Congestion Control in OVS (Open vSwitch) using ingress policing

National Institute of Technology, Karnataka Guide – Dr. Saumya Hegde, CSE, NITK

## 3. A lightweight authentication and key agreement for multi-server architecture

National Institute of Technology, Nagaland Guide – Dr. Sibesh Lodh, CSE, NITN

#### Presentations

Poster Presentation: "Visual Feedback Interface for Audio Communication Over Lossy and High

Delay Networks"

Conference: COMPASS 2024

Venue: IIIT Delhi

Date: 7th - 9th July 2024

Doctoral Consortium: "Visual Feedback Interface for Audio Communication Over Lossy and High

Delay Networks"

Conference: COMPASS 2024

Venue: IIIT Delhi

**Date:** 7th - 9th July 2024

Poster Presentation: "Visual Feedback Interface for Audio Communication Over Lossy and High

Delay Networks"

Conference: RISC 2024

Venue: Indian Institute of Technology Bombay (IITB)

Date: 9th March 2024

**Description:** Presented a poster on the topic of "Visual Feedback Interface for Audio Communication Over Lossy and High Delay Networks" at RISC 2024, held at IITB. The presentation addressed challenges encountered in audio communication under adverse network conditions, proposed solutions aimed at enhancing user experience, and presented findings from a conducted user study validating our hypotheses.

#### Specialized Skills

**Programming Languages:** C, C++, Python, Java **Tools:** Wireshark, Docker, Mininet, Microsoft Excel

#### Hobbies

Athletics: Football, Gym

Gaming (PC/PS): FIFA (Participated and won in many competitions)