

## TRIBHUVAN UNIVERSITY INSTITUTE OF ENGINEERING PURWANCHAL CAMPUS

## A MINOR PROJECT PROPOSAL ON A DECENTRALIZED SOCIAL MEDIA FOR SCIENTIFIC COMMUNICATION

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API : Application Programming Interface

Colab : Colaboratory

#### INTRODUCTION

#### 1.1 Background

Scientific communication plays a vital role in advancing research and knowledge sharing across academic communities. Traditional social media platforms while effective for general communication often lacks specialized features necessary for scientific discource. The emergence of decentralized technologies particularly the ActivityPub [1] Protocol and the Fediverse presents an oppurtunity to create a more switable platform for academic communication.

#### 1.2 Gap Identification

Current platforms for scientific communication face several limitations:

- Limited accessibility of scientific communication to the wider population beyond the niche community.
- Limited support for mathematical expressions and scientific notations.
- Lack of integration with academic citation systems.

#### 1.3 Motivation

To create a social media platform that empowers researchers and academics to communicate their scientific work effectively. By bridging the gap between specialized communities and the general public, the platform aims to promote the understanding and appreciation of cutting-edge research across a wider audience.

#### 1.4 Objectives

- Develop a federated social media platform using ActivityPub protocol with support for mathematical/scientific typesetting.
- Enable seamless integration with existing reference management tools

## RELATED THEORY

2.1 Related Theory goes here

## LITERATURE REVIEW

Literature review goes here

## **METHODOLOGY**

- 4.1 Overview
- 4.2 Other section goes here

## **EXPECTED RESULTS**

## REFERENCES

[1] C. Webber and J. Tallon, "Activitypub," W3C. [Online]. Available: https://www.w3.org/TR/activitypub/

### APPENDIX A

#### APPENDIX B