# FINAL CAPSTONE: Crypto currency pricing predictive model

### Introduction

The cryptocurrency market is volatile, and predicting prices can significantly benefit investors and traders. Since 2009 trading crypto has created numerous millionaires and billionaires. I was always fascinated by price movements in the crypto sector. This project proposes developing a model to predict token prices, leveraging machine learning techniques and analyzing historical data trends. The goal is to enhance decision–making capabilities and drive profitable investments.

#### **Dataset**

The data for my analysis comes from <u>Top 50 Cryptocurrency Dataset</u> available on Kaggle.com. It has historical pricing per 5-minute intervals from October 20, 2023 - October 19, 2024. It contains statistics for 50 top cryptocurrencies. I will look into Ethereum token and other tokens built on Ethereum network.

# Research design

I will analyze time series graph, compare price difference between subsequent periods and create a prediction model. I aim to create keras sequential model frequently used to predict stock market prices. I will fine tune the model to determine the best outcome and test it out on the different tokens (layer 2, like Optimism).

### Audience.

The primary audience includes cryptocurrency traders, investors, financial analysts, and enthusiasts interested in leveraging predictive analytics for crypto investments.