

# Economic Data Visualization

Junior Varsity SD



# What is our project idea?

Economic Data  
Visualization

Primarily bivariate relationships

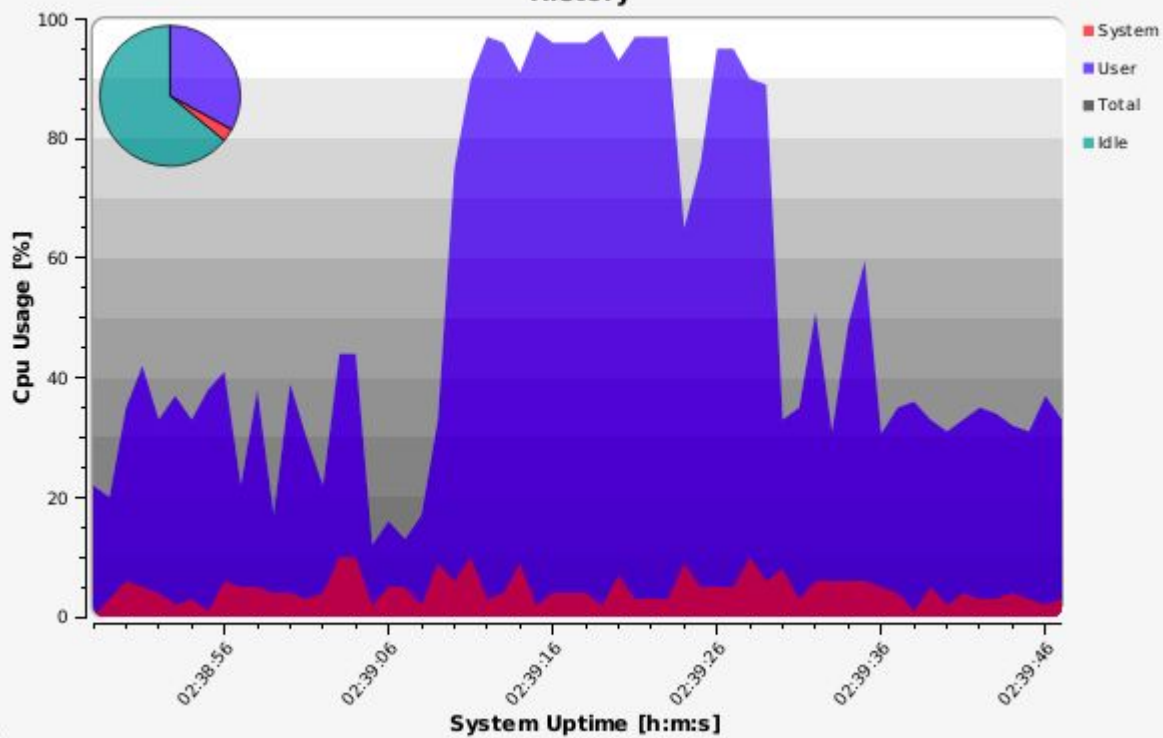
For example: US GDP vs  
Unemployment



# Overview

- Produce graphs representing various economic models
- Implement linear regression in C++
  - Custom built to deal with large data
- Utilize the FRED (Federal Reserve Economic Data) API to obtain the necessary data for visualization
- The Qwt library will ensure precision in the plots for our data

### History



# Why create this?

- Fast visualization with C++
- Built-in data import from FRED
  - This can be difficult in other languages
- Leveraging big data with linear regression to show relationships
- Learning more about working with data in C++!
- Applying C++ to other fields than software development



# Primary Features

- Produce precise graphs based on user specifications
- Create a PNG file of the plot

# How to use our tool

- Workflow would look as follow:
  - Select certain variables to analyze from FRED
  - Our program imports the variables via the FRED api
  - A relationship between two variables is selected to examine
  - Our program fits a linear model to the data and plots it
  - Researcher is impressed by the speed and ease-of-use of our tool