

Project Proposal

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Project Title : Exploring the Nexus: Tech Support Scams and Unemployment Rates.

Introduction and Motivation:

A worldwide phenomenon where we are witnessing rapid technological growth and increasing internet penetration, the prevalence of tech support scams presents a unique and concerning challenge. If it were measured as a country, then cybercrime — which is predicted to inflict damages totaling \$6 trillion USD globally in 2021 — would be the world's third-largest economy after the U.S. and China^[1]. The motivation behind this project stems from the need to understand the possible correlation between the occurrence of tech support scams and its impact on unemployment rates.

1. Is there any geographical pattern to the occurrence of tech support scams (e.g., higher concentration in certain countries or regions), and does this align with regions experiencing higher unemployment rates?
2. Are there any particular domains, URLs, or email addresses (from the Tech Support Scams Dataset) that are consistently associated with higher numbers of reported scams in countries with higher unemployment rates?

Data Sources :

- A. Tech Support Scams Dataset and their popups from 2018-2021.
- B. Unemployment dataset from past 31 years.

The combination of dataset A and B will allow me to answer both question 1 and 2.

Description of data source:

- Tabular data: 11.395K rows X 14 Columns. It has both spatial and temporal attributes as well as url and domain names.
<https://github.com/choozn/PopupDB-Data/>
- Unemployment dataset: 235 rows and 33 columns
<https://data.worldbank.org/indicator/SL.UEM.TOTL.ZS>

References :

[1] Sausalito, Calif. – Nov. 13, 2020. *Cybercrime To Cost The World \$10.5 Trillion Annually By 2025.* <https://cybersecurityventures.com/hackerpocalypse-cybercrime-report-2016/>