Gaming and Political Extremism

CS 4624 Multimedia, Hypertext, and Information Access
Dr. Edward A. Fox
Virginia Tech, Blacksburg, VA 24061
Niko Olson, Mauricio Lovelace, Earl Carter
May 3, 2023
Outline

- Project Overview
- Timeline
- Problem & Motivation
- Deliverables
- Visualizations
- Problems & Solutions
- Future Work & Project Expansion Ideas
- Experience Gained
- Acknowledgements
- References
Project Overview

● Client
  ○ Dr. Ivory
  ○ Virginia Tech Gaming and Media Effects Laboratory

● Problem
  ○ Examining Political Extremism in Games

● Deliverables
  ○ Code
  ○ Dataset
  ○ Visualizations
Timeline

- February 14: Reassess Milestones
- February 28: Begin Data Scraping
- March 14: Finish Data Scraping
- March 31: Clean Data & Create Visualizations
- April 7: Begin User Manual, Final Report, and Final Presentation
- April 17: Finalize User Manual, Final Report, and Final Presentation
- May 3: Finish research and make recommendations regarding NLP and sentiment analysis
Problem & Motivation

Problem:

- Track & gather data relating to political extremism and engagement in the gaming community
  - Conduct empirical analysis on data and present findings

Motivation:

- Politically extreme communities are a societal problem
  - Likened to public health issue
- Do certain communities give rise to extreme beliefs?
Deliverables

- YouTube Metadata Scraper Script
  - Apps Script (Javascript)
- Data Repository
  - CSVs and gsheets
- Database cleaned
  - Pandas Python library
  - CSV modules
- Visualizations created
  - Plotly Python library
Visualizations and Findings

Youtube Views Over Time

Legend
- Arma 2
- Arma 3
- Gamergate
- Rising Storm 2 Vietnam
- War of Rights

Gamergate
2016 U.S president election
Jan 6 2021
Problems and Solutions

- Collecting YouTube Data
  - Youtube API Scripting language
  - Bugs, errors, learning curve
- Data Cleaning
  - Repeats, unrelated data, blanks
- Data Visualization
  - Design choices, interactivity
- Changing client vision
Future Work & Project Expansion Ideas

- Data Analysis
  - Political Event Timeline
- Comment Collection
  - Youtube API
- Source Expansion
- Sentiment Analysis
Experience Gained

- Client interaction
- Collaboration and delegation
- Google’s scripting language
- Data shaping, processing, and visualization
- Scheduling
- Research
- Tool consideration
Acknowledgements

Grants:
- Research Leave Augmentation from VT Institute for Creativity, Arts, and Technology (ICAT), Spring 2023

Client:
- Dr. Ivory
- Michael Senters

Professor:
- Dr. Fox
References
