



Florida International University

Spring 2024 Capstone II Project

FIU OSINT-BOT

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SUMMARY

Throughout this venture, our team celebrated numerous milestones, yet we encountered a significant hurdle when we faced a paywall on the PimEyes site, which limited our access to vital data. In response to this challenge, we strategically pivoted to utilizing the TinEye program. Including with the successful integration of the DNS look up and Social Scraper being successfully housed in one application that enharbons a robust encryption to keep the data retrieved secured

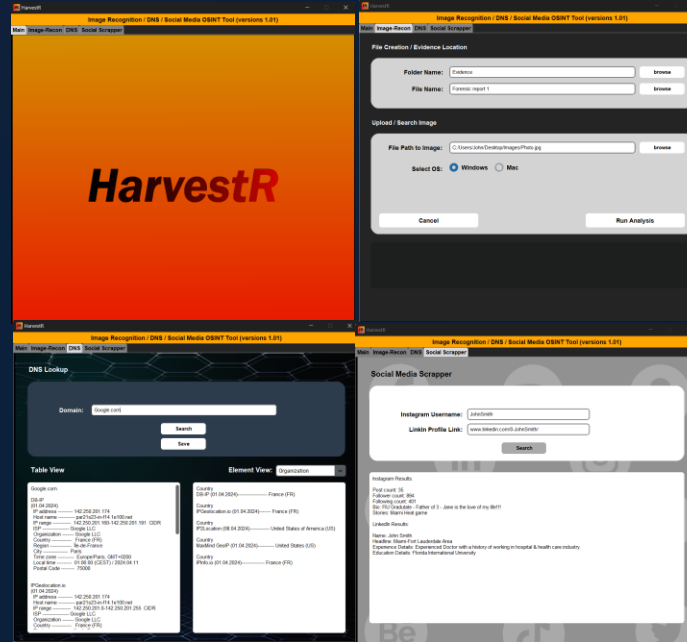
INDIVIDUAL CONTRIBUTION

I developed a Python program using PyAutoGUI that automates image searches on PimEyes, leveraging pre-saved images to significantly reduce manual effort. This program adeptly manages web navigation, image uploads, result recording, and error handling. To enhance security, I integrated an encryption module that safeguards the images and associated data, ensuring robust protection without diminishing the program's functionality. My contributions underscore a strong commitment to optimizing efficiency and upholding data security within the project.

PROBLEM

The challenge involves creating a program that uses facial recognition and web scraping technologies for research, while upholding ethics, privacy, security, and transparency, balancing innovation with responsible technology use and ensuring legal and ethical integrity. Including creating a comprehensive GUI to house the programs into one machine.

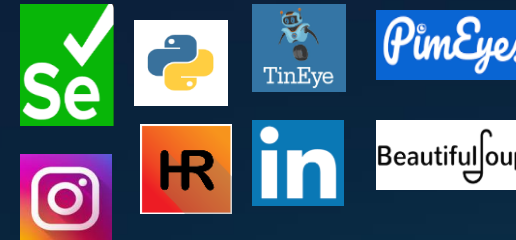
OBJECT DESIGN



OBJECTIVE

Our program is fundamentally aimed at elevating the realms of education and research. Through our initiatives, we aim to illuminate the intricate dynamics of publicly accessible information, particularly highlighting the ethical considerations and societal implications of employing facial recognition and web scraping technologies. Our activities are meticulously crafted to explore these technologies' vast potential and their consequential impacts, fostering a deeper understanding and responsible usage within the community.

IMPLEMENTATION



REQUIREMENTS

HarvestR requires installing multiple third-party packages to include downloading the following within terminal: selenium, customtkinter, pyautogui, tkinter, BeautifulSoup, pywinstyle along with the user's preferred IDE or Python IDLE version 3.11 or higher.

ATTENTION: Participants involved in any project are fully informed about the nature, purpose, and methodologies involved, and their consent is obtained prior to participation. This project provides an aggregate analysis derived from publicly available data sources. It is crucial to acknowledge that the information presented here is intended exclusively for academic and informational purposes. We firmly oppose and abstain from personally employing facial recognition technologies or web scraping methods that compromise individual privacy.

ACKNOWLEDGEMENT

The material presented in this poster is based upon the work supported by Dr. Masoud Sadjadi. We'll thank Dr. Masoud Sadjadi for his assistance and mentorship that I/we received throughout the senior design project.