

Kiana Kiashemshaki – Project Portfolio

Tel: (415)-696-0546 Email: Kia.kiana1996@gmail.com LinkedIn: [linkedin.com/in/kianakiashemshaki](https://www.linkedin.com/in/kianakiashemshaki) Website: Kiana-kia.com

Introduction

I am a passionate and detail-oriented computer scientist specializing in Cybersecurity. With a strong academic foundation and hands-on experience in web development, data science, and cybersecurity tools, I aim to leverage my skills to develop innovative solutions that enhance security and user experience. My portfolio showcases my journey through various academic, professional, and personal projects.

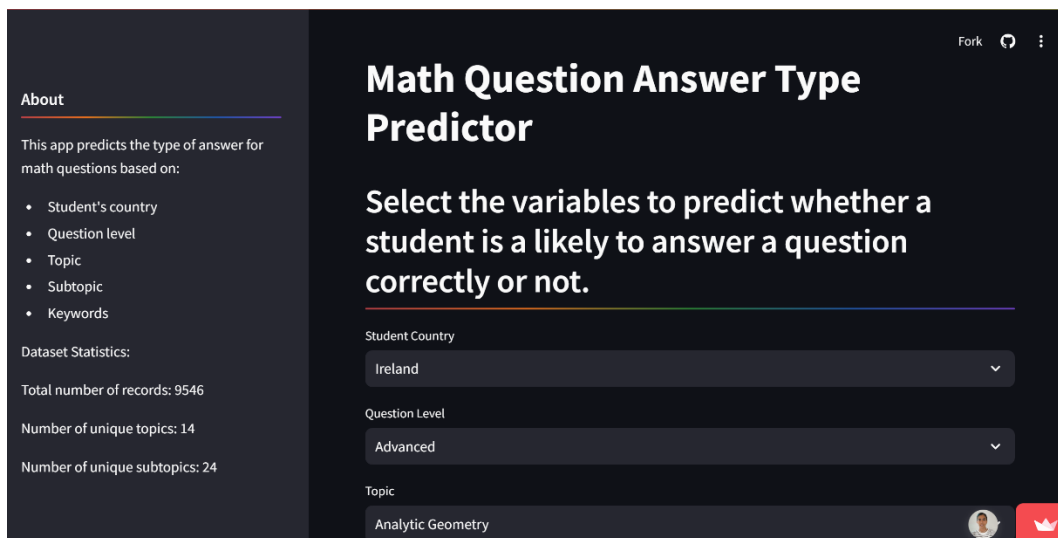
Projects

1 - Title: Comprehensive Analysis of Factors Affecting Mathematics Learning in Higher Education

Skills: Python, Pandas, NumPy, scikit-learn, Matplotlib, Statistical Analysis.

Description: Conducted an in-depth analysis of factors influencing mathematics learning outcomes in higher education. Utilized statistical testing and machine learning techniques to predict performance trends and cluster similar behaviors. This project provided actionable insights into enhancing educational strategies for students.

Link: [Math App](#)



2 - Title: Developing Hands-On Modules on Digital Forensics

Skills: Autopsy, Kali Linux, FTK Imager, Volatility

Description: Designed beginner-friendly educational modules focused on digital forensics. Topics covered hard disk forensics, memory forensics, and Android phone investigations. The modules aimed to make complex forensic concepts accessible while encouraging practical learning.

Link: [Digital Forensics](#)

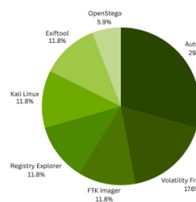
Developing Hands-on Modules on Digital Forensics for the Future Students

M.S in CS Kiana Kiashemshaki
Supervised by Dr. Roy

Introduction

- Preparing hands-on projects for Digital Forensics courses is challenging because it demands realistic artifacts reflecting current technologies and scenarios also it takes a lot of time.
- Project Goal: Provide realistic and educational hands-on modules involving Windows computers and Android phone forensic training.
- Existing CTF artifacts from Magnet Axiom are valuable but not beginner-friendly.
- Enhancing these artifacts with guided questions and instructions can make them suitable for new learners.

Usage of Digital Forensics Tools



Methodology

- **Analyzing the CTF artifacts:** Got relevant CTF challenges from public sources e.g., Magnet Axiom 2020 CTF.
- **Breaking down the hard CTF problem into multiple easier problems:** For each smaller challenge prepared detailed guidelines for a beginner student.
- **Integration:** Develop one project out of each smaller challenge and integrated these together as a final project.
- **Testing:** Ensured everything is working accurately and matches the intended outcomes.
- **Keys for the future instructor:** Provide the solutions for each problem to assist future instructors.

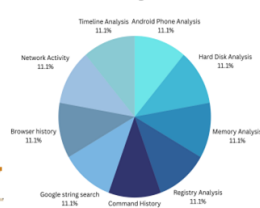
Conclusion and Result

- Created four hands-on forensic modules focusing on Hard Disk forensics, Memory forensics and Android forensics.

Future work

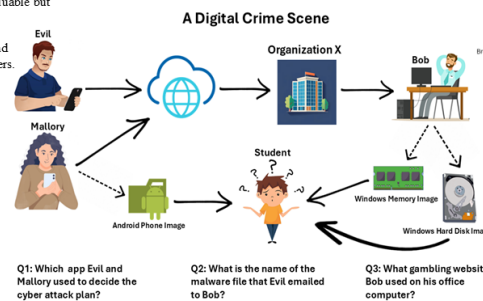
- Develop realistic Windows-based forensic artifacts from scratch with EWF techniques to reduce storage size.

Subdomains of Digital Forensics



Acknowledgments

I would like to express my gratitude to my supervisor, Dr. Roy, for his invaluable guidance, support, and encouragement throughout this project.



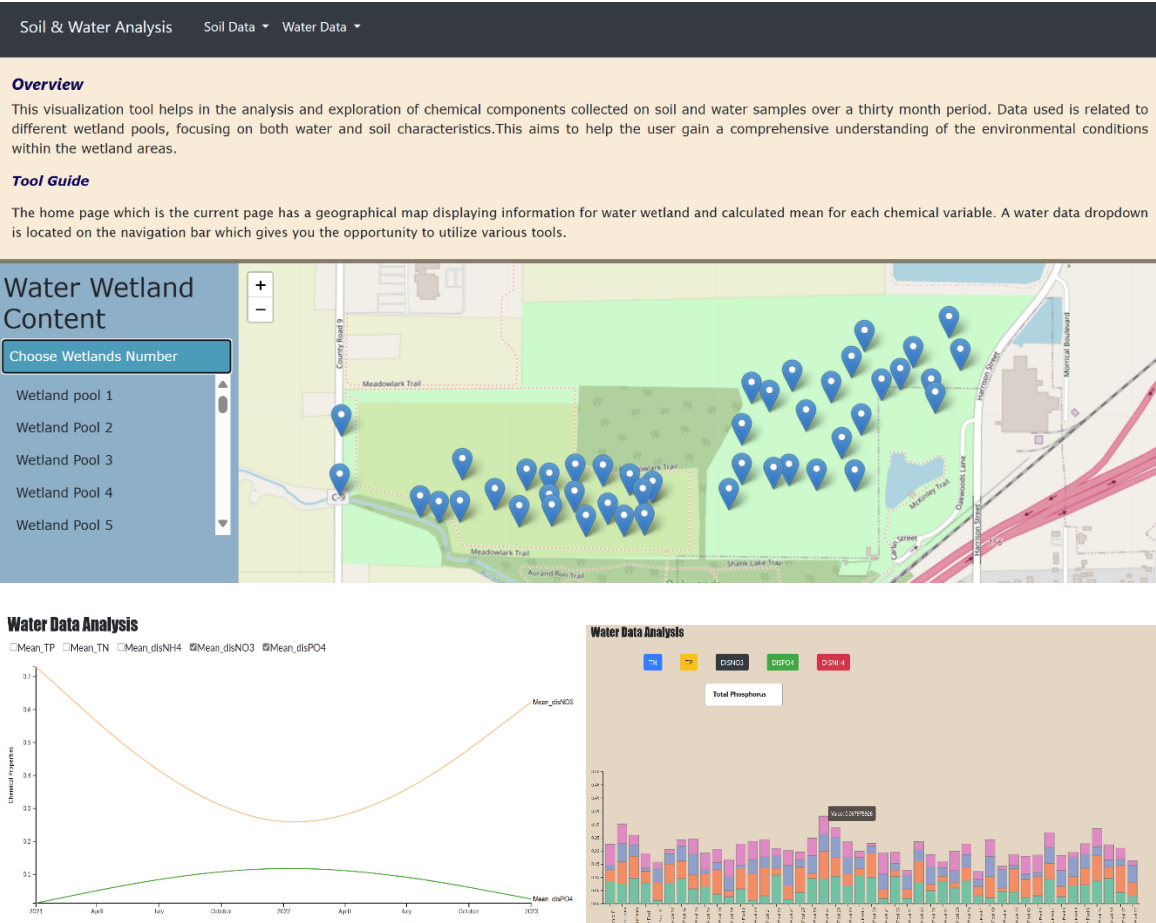
BGSU | Department of
**Computer
Science**
BOWLING GREEN STATE UNIVERSITY

3 - Title: Water and Soil Analysis Visualization

Skills: HTML, CSS, JavaScript, D3.js, Bootstrap.

Description: Developed interactive and dynamic visualizations for field data related to water and soil behaviors. The project allowed scientists and researchers to explore and analyze experimental data in a visually engaging and intuitive manner..

Link: Visualization

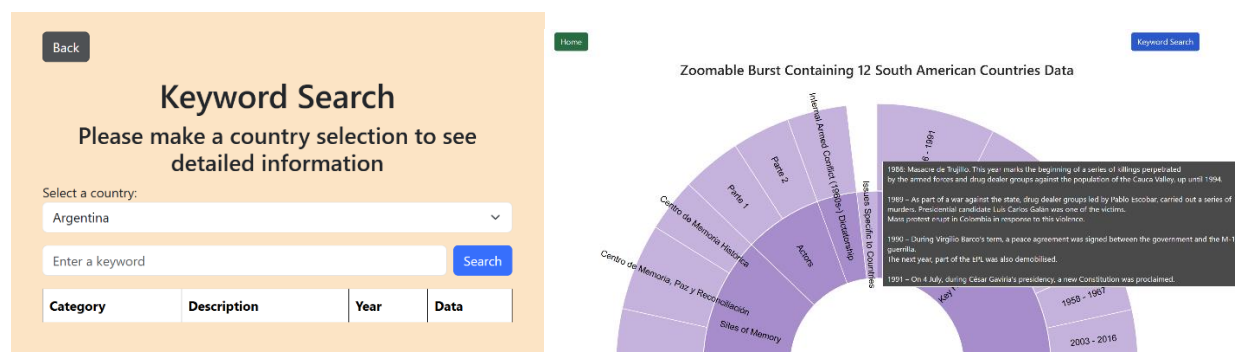
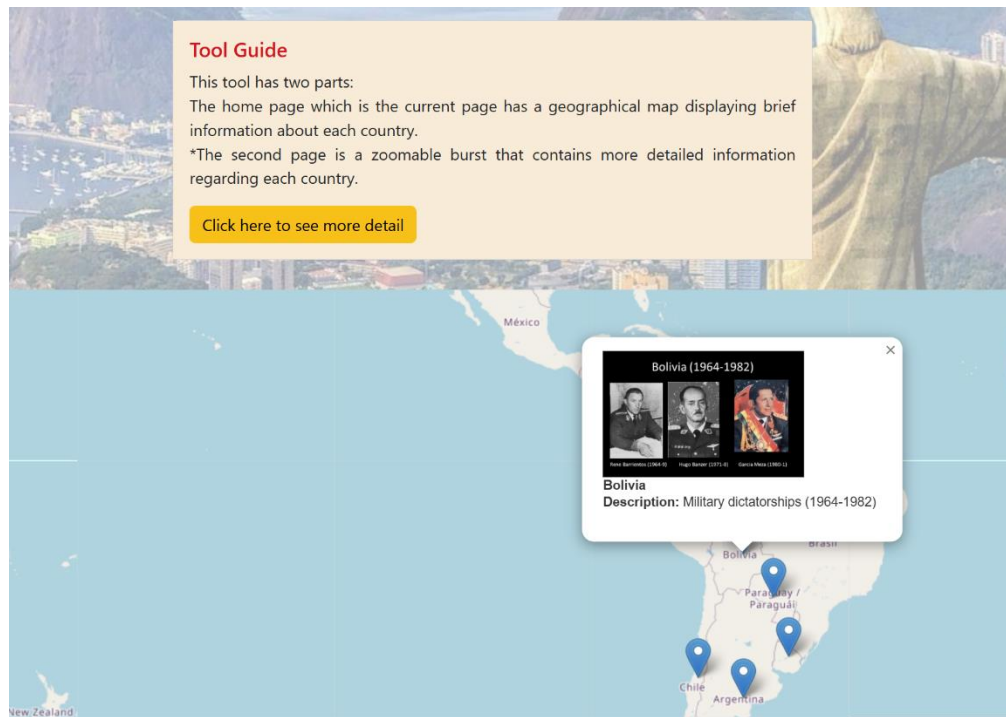


4 - Title: South America Country Analysis

Skills: HTML, CSS, JavaScript, D3.js, Bootstrap.

Description: Created a data visualization tool to explore socio-economic and geographic datasets from 12 South American countries. The project utilized interactive charts and maps to reveal patterns and regional insights effectively.

Link: [Visualization](#)



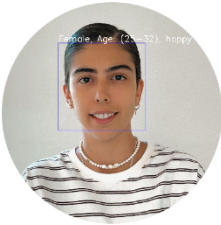
5 - Title: Face Detection Application

Skills: Python, Flask, OpenCV, MTCNN.

Description: Built a user-friendly web application that enables face detection in uploaded images. Leveraged the MTCNN algorithm for precise recognition, ensuring a seamless user experience through an intuitive interface.

Link: [Repository access](#)

Project Description



Hi, I'm Kiana Kiashemshaki. This project detects facial emotions using the FER library in Python, integrated with Flask and OpenCV. Upload an image, and it will highlight faces and display the detected emotions (like smiles), along with predicted age and gender. This project showcases a simple yet effective implementation of facial detection, emotion recognition, and age/gender estimation, which is a good example of leveraging deep learning for real-world applications.

Upload Image

Choose an image:

No file chosen

© Copyright Kiana Kia :)

