# **Expanding Digital Forensics Education** with Artifact Curation and Scalable, Accessible **Artifact Exercises**



# University of New Haven

## Challenge:

- Vast diversity and volume of digital artifacts makes it very difficult to integrate them into educational programs, which are the cornerstone or digital investigations.
- Causes a learning gap in academic programs, decreasing the possibility of students graduating with the necessary skills to conduct artifact analysis upon graduation.

#### Solution:

- Use the Artifact Genome Project at agp.newhaven.edu.
- A granular, validated academic artifact dataset as well as academic exercises that employ them.

ARTIFACT GENOME PROJECT Curate & Sanitize Artifacts Present/Publish And/or Conference/Journal Create Educational Modules **Digital Forensics** Competitions **University Courses** 

## **Scientific Impact:**

- Curated artifacts show what information organizations are collecting from users utilizing their technologies. Educational modules teach users about them, how to extract them and how they can aid in an investigation. Students and others prepare better for real world investigations.
- The research community benefits from continued research which also leads to new published works.

#### **Broader Impact and Broader Participation:**

- Artifacts produced impact practice. Artifact curation and analysis can solve real criminal cases directly impacting society.
- In addition to normal usage, implementation has occurred in both. digital forensic university courses and digital forensic conferences.
- Four papers have been presented and published, one is pending publishing and one is pending submission. Indirectly, a few more papers have contributed artifacts to the project from other research led by the PI.
- Current users (559). Organizations worldwide (53 countries): private, local, federal and academia (274). Over 1,200 artifacts and 34 educational modules submitted. 9 students have been employed to work on the project. 10 more have volunteered or interned.

Project info (1900210, University of New Haven, Dr. Ibrahim Baggili)