

TECHNICA

BEST DIGITAL FORENSIC RELATED HACK

TECHNICA

CIPHER TECH WILL AWARD:

4 Raspberry Pi 3 B+ Kits

One to each member of the team who designs the best application that pertains in some way to digital forensics.



- 🔒 **Digital Forensics** is the extraction and analysis of digital evidence.
- 🔒 **Digital Forensic Software Developers** build tools to search for clues to answer specific questions about the device's use in support of an investigation.
- 🔒 **Software Reverse Engineering** is the process of figuring out how a program works.
- 🔒 **Software Reverse Engineers** analyze software to determine its capabilities, find flaws, and/or determine authorship/similarity.

DIGITAL FORENSIC PROJECT EXAMPLES/IDEAS:

- ❑ **Carving** - Extract structured binary data from an unstructured data source.
- ❑ **Encryption** - Implement a novel use for encryption or find an exploit in an existing use of encryption.
- ❑ **File Parsing** - Develop a routine to parse an application's data that is not otherwise viewable.
- ❑ **File Repair** - Create a piece of software that can repair damaged or corrupted files.
- ❑ **Image Recognition** - Create a piece of software that can identify an object.
- ❑ **Log/File System Analysis** - Create a piece of software that aids analysts to quickly and accurately consume the contents of logs or a file system.
- ❑ **Reverse Engineering** - Extend an existing reverse engineering tool or create a new tool to assist in the analysis of a binary file.
- ❑ **Steganography** - Develop a technique for data hiding or create a tool to detect and extract hidden information.



Previous Winners of our Digital Forensic Hack

- 🔒 A detection algorithm for images that had been edited
- 🔒 A method for hiding data in audio files (akin to steganography)
- 🔒 A hardware device that stored multiple mag-swipe cards' signature
- 🔒 A Bluetooth DoS algorithm (that was demonstrated very responsibly)
- 🔒 A compiler, which was developed and used to design a neural network
- 🔒 A team that reverse engineered and parsed the Nintendo Switch Joy-Con Bluetooth spec extension