

Aaron GILKES

Canadian Police College



PROFESSIONAL EXPERIENCE

Royal Canadian Mounted Police, Canadian Police College in Ottawa -

Acting Sergeant/Cybercrime Instructor

JUNE 2020 - PRESENT

- Instruction cybercrime and digital evidence related material.
- Development of Training.

Royal Canadian Mounted Police, “E” Division Digital Forensics Services -

Digital Forensics Supervisor

AUGUST 2018 – JUNE 2020

- Supervise technological crime investigators.
- Development and Training of digital evidence acquisition methodologies, techniques and legal advice.
- Conduct forensic examination of computers, digital media, and mobile computing devices.
- Provide technological and computer forensic support for municipal law enforcement and RCMP “E” Division investigations.

Royal Canadian Mounted Police, “C” Division Integrated Technological Crime Unit -

Cybercrime Investigator

MAY 2015 - AUGUST 2018

- Conduct forensic examination of computers, digital media, and mobile computing devices.
- Investigate cybercrime and other Internet based crimes locally and internationally.
- Provide technological and legal support for RCMP “C” Division investigations.
- Assist NCFTA Canada in the development of cybercrime tools for research and law enforcement.
- Development of the RCMP Virtual Currency initiative/program.

Royal Canadian Mounted Police, “C” Division Proceeds of Crime Unit - Investigator

JANUARY 2011 - MAY
2015

- Conduct complex Money Laundering investigations locally and internationally.
- Affiant duties on major investigations (Developing innovative techniques).
- Virtual Currency and value tracking.
- Enforcement of the Proceeds of Crime Money Laundering and Terrorist Financing Act.
- Collaboration with Corporate security of major banks for recovery of funds (unofficial task forces).
- Extensive collaboration with the Financial Transactions and Reports Analysis Centre (FINTRAC)

EDUCATION, TRAINING and DEVELOPMENT

Certificate in Cyber Security Fundamentals, *York School of Continuing Education, Toronto, Ontario*

September, 2020

5 month Cyber Security program. The program is designed to deepen participant understanding of cyber security topics, strengthen skills as an IT manager or project lead and prepare participants to earn a CISSP designation. Courses taken included Introduction to Cyber Security, Security Risk Management and Governance, as well as Data, Asset and Identity Protection.

Blacklight Tool Training Course, *“E” Division, Surrey, British Columbia*

JULY, 2019

Windows and OS X forensics; NTFS and HFS+ file system forensics, memory forensics.

Macquisition and Blacklight software training.

X-Ways Forensic I, *Vancouver, British Columbia*

JUNE, 2019

Comprehensive training in the computer forensic software X-Ways Forensics. Topics include data storage concepts, methods of data hiding, file system and file metadata, how to analyze various forensically relevant file types, and explain the theoretical background of functionality like file recovery, file header signature identification, hash databases, slack space extraction, physical disk image creation and keyword searches.

Peer-to-Peer Investigations course, *Canadian Police College, Ottawa, Ontario*

APRIL 2019

8 day course on tracking individuals and evidence on Peer-to-Peer sharing platforms.

Mobile Device Acquisition and Analysis course, *Canadian Police College, Ottawa, Ontario*

MARCH, 2019

10 day course on mobile device technology, data acquisition methods, and analysis of acquired data. Topics include introduction to cellular technology, legal authority, disclosure & testimony; forensic examination process including seizure, analysis, reporting and verification; acquisition and analysis of mobile devices including SIM cards, Android, Windows, Blackberry, iOS and others; SQLite database file structure and advanced analysis; introduction to advanced acquisition techniques including rooting, jailbreaking, JTAG (Joint Test Action Group), chip-off, bootloader, and ISP (In-System Programming).

Internet Evidence Analysis Course, *Canadian Police College, Ottawa, Ontario*

FEBRUARY, 2019

10 day comprehensive course in the analysis of evidence relating to internet activity. Topics included Internet browsers, email, instant messaging, peer-to-peer clients, online communities and social networking, as well as the principles and methodologies of forensically analyzing new programs.

Network Investigative Techniques Course, *Canadian Police College, Ottawa, Ontario*

JANUARY, 2019

10 day comprehensive course in the search and seizure strategies of network data and investigations of small Windows based computer networks. Topics include router forensics, Windows Server, SQL forensics, network storage and wireless networks.

Computer Forensic Examiner Course, *Canadian Police College, Ottawa, Ontario*

NOVEMBER, 2015

15 day comprehensive course in the search and seizure of stand-alone computer systems in a workstation environment. Topics included principles of digital forensics, computer hardware, hard drive topologies, law and evidence, forensic seizure of computer data, modern file systems and windows forensics.

CompTIA Network+ CERTIFICATION,

OCTOBER, 2018

CompTIA A+ CERTIFICATION,

MAY, 2015

Five day comprehensive course to prepare for CompTIA A+ Essentials and Practical Applications certification exam, which are industry standards. Topics included the installation of operating systems and peripherals, configuration and upgrading of computers, computer repairs and troubleshooting, and networking and security. CompTIA A+ certification examination passed.

INSTRUCTION and PRESENTATIONS

I have been a subject matter expert instructor for cybercrime on many courses given at and for the Canadian Police College in both French and English. The courses include Major Crimes, Organized Crimes, Financial Crimes and Warrant Courses. I have also guest lectured several times as part of the Concordia University Cyber security program.

I have been a conferencier on multiple subjects, though most have been about money laundering particularly through virtual currencies and dark markets. I presented at the following conferences and workshops include the following:

- Serene-Risc Workshop 2017. Presenter and Panelist : 'Bitcoin, the Gateway Currency'
- National Capital Region Digital Forensics Group Conference 2017. Presenter : 'Virtual Currencies and Crime'
- Association of Certified Anti-Money Laundering Specialists 2018. Presenter : 'Bitcoin and Virtual Currencies : Regulation challenges'
- Interac Cybercrime conference 2019. Presenter : 'Behind Canadian mobile payment phishing campaigns'
- TRACE Bribery & Economic Crime Summit Pre-Conference 2019. Presenter : 'Virtual Currency and Crime'
- International Association of Financial Crimes Investigators Training Conference 2019. Presenter : 'Phishing and Smishing; Anatomy of a campaign'