The research of cybersecurity faculty at the University of Hawai‘i - Manoa (UHM) covers many critical issues, including cryptography, cloud security, IoT security, information assurance, machine learning security, mobile/wireless security, network security, smart grid security, software/hardware security, supported by AFOSR, AFRL, EPSRC, NASA, NSA, NSF, NRL, ONR, ODNI, and industrial partners. UHM faculty have published 300+ papers in prestigious peer-reviewed journals and conferences, mentored security-focused graduate students, served as journal editors and reviewers, led research conferences, and given keynotes/invited talks at research conferences. These research successes earned UHM a CAE-R designation in May 2015. The designation provided many opportunities for Hawaiian communities including the establishment of the NSF CyberCorps™ SFS program in 2016.

We have enhanced computer science BA/BS degrees with a Security Science Concentration and a management MS degree with Information Security. We have collaborated with local government, education institutions, and industry communities and founded CyberHawaii in 2016, which broadens our outreach with high schools, community colleges, Hawaii DOD, Hawaii DOE, etc. We have hosted 18 NSF/NSA GenCyber Camps across 4 islands with 600+ campers since 2015. We have improved our curriculums with new security courses, including digital forensics, special topics in security (IoT, CPS, drone, wireless security, penetration testing, reverse engineering, etc.). We have worked with the UHM Airforce ROTC program and built the AFRL Cyber Spectrum Collaborative Research Environment program at UHM in 2017. We are currently improving cyber operation capabilities to build a CAE-OP in the next two years.

DESIGNATIONS

• CAE - Cyber Defense Research

CONTACT INFORMATION

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GenCyber Camp