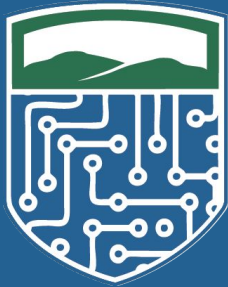CHAMPLAIN COLLEGE

The Leahy Center for Digital Forensics & Cybersecurity

Prepared for the Vermont House Committee on Energy and Technology
April 13, 2022

Cybersecurity Education at Champlain

Aligns with Champlain's career-focused mission

Certified as a NSA Center of Academic Excellence in Cybersecurity Education since 2007

Undergraduate and Graduate majors in both Cybersecurity and Digital Forensics.
- Current students in those disciplines:
  - 223 on-campus students
  - 1181 online students

Leahy Center for Digital Forensics & Cybersecurity

Opened in 2010, the Leahy Center is a Center of Experience at Champlain College with an educational mission to provide real world experience for students.

It's a world-class laboratory with state-of-the-art technology, providing digital forensics and cybersecurity services to a wide variety of organizations, from government bodies to local businesses.

80-100 undergraduates work at the Center each semester

Projects guided by faculty and community mentors

Leahy Center for Digital Forensics & Cybersecurity

Who We Are:

A center of education, training, and information resources for digital investigation, law enforcement, government, and higher education communities.

What We Do:

The mission of The Leahy Center is to serve as a practical and hands-on laboratory environment, promoting the advancement of digital forensics and cybersecurity education at Champlain College and in our community. Most importantly, the Leahy Center is a place for the next generation of specialists and engineers to learn, grow, and hone their talents.

How We Do It:

Through innovative, team-based research projects and outreach initiatives.

Funding:

Base funded by Champlain College. Multiple year support for >10k student hours through grants from DoJ, DHS, and contracts with US Secret Service.

10+ Years of the Leahy Center

480
Students
Employed

115
Completed
Projects

100K
Hours Worked by
Student Employees

Leahy Center Pillars

Research & Development

Professional Services

Outreach and Education

Research: Internet of Things

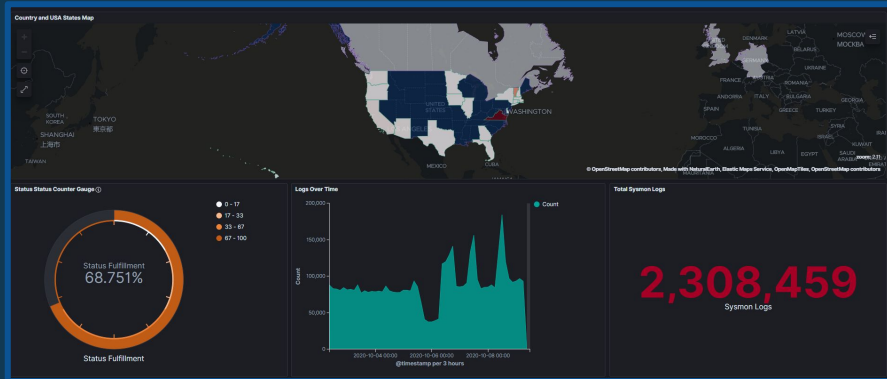Network of physical devices connecting and exchanging data with each other

Smart home, Health devices, Security devices, etc.

As of 2020, **5.8B IoT Devices**

Leahy Center Research:

- Funded by **grant from Department of Justice** and **contract with US Secret Service**
- Multiple year support for >10,000 student hours!

Professional Services

Currently contracted to provide IT and Cybersecurity services to critical non-profit organizations in the State of Vermont

- Champlain students **support** clients by creating and maintaining info systems and monitoring services

- Provide **peace-of-mind security** to those clients through assessment, monitoring, and incident response

- Amazing opportunity for students to gain experience while helping resource-constrained organizations

Education and Outreach

Numerous initiatives:

- Workshops
- Training
- Conferences
- K-12 programming

Includes **CyberTech VT**

- CyberTech is a student lead non-profit project to raise awareness of cybersecurity issues and introducing safe computer practices to schools across Vermont.
- Provides engaging presentations, hands-on demonstrations, and resources to schools to introduce cybersecurity topics and materials that may not be covered in the traditional classroom.
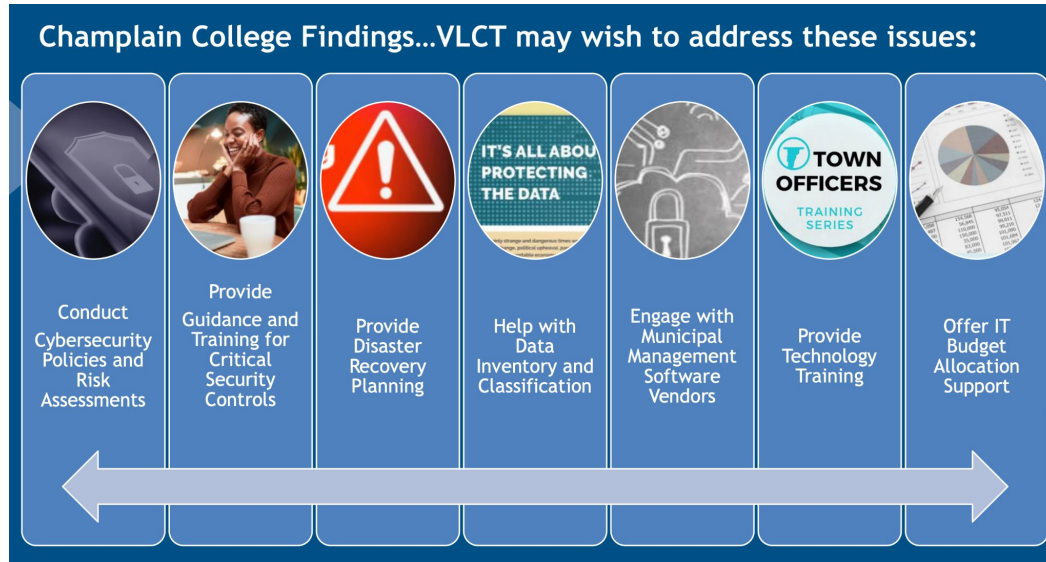
Leahy Center Projects and Initiatives

Recent $755k federal appropriation:

Thanks to the continued support of Senator Leahy, the Center will receive funding to:

"**strengthen cyber defenses for Vermont-based organizations, including municipalities, schools, nonprofits, and small businesses**, to reduce the risk of cyber threats and to support the needs of local law enforcement, while simultaneously educating the next cybersecurity workforce."

This can build upon our work with the Vermont League of Cities and Towns

Champlain College Findings...VLCT may wish to address these issues:

- Conduct Cybersecurity Policies and Risk Assessments
- Provide Guidance and Training for Critical Security Controls
- Provide Disaster Recovery Planning
- Help with Data Inventory and Classification
- Engage with Municipal Management Software Vendors
- Provide Technology Training
- Offer IT Budget Allocation Support

Leahy Center Projects and Initiatives

Vermont Privacy Project (VP2):

> Vermont Privacy Project brings together students and practitioners with interest and expertise in computer science, statistics, law, policy, and social science. It seeks to advance understanding of privacy issues and develop methods, tools, and policies to further the protection of data containing information about individuals used by local government agencies, non-profit entities, and small businesses operating in the State of Vermont. The team explores cross-disciplinary approaches to data privacy protection to include devising privacy risk management frameworks, designing training and outreach materials, and drafting legislative and policy recommendations.

USSS National Computer Forensic Institute (NCFI) Collaboration:

- NCFI trains 1,000's of law enforcement officers annually
- Champlain faculty and students are providing
  - Curriculum assistance with development of pre and post-training assessments and college pathways for NCFI students
  - Internet of Things forensic artifact database for investigators
  - A cyber-range for NCFI training courses on ransomware response and other critical needs
- Multi-year funding through a combination of grants and direct contracts

Leahy Center Projects and Initiatives

GenCyber Virtual High School Internships
- Champlain students working through our Cyber Tech program are providing cybersecurity virtual internships to high school students
- Funded by NSA to encourage high school students to pursue cybersecurity as a career

National White Collar Crime Center (NW3C) Collaboration:
- NW3C trains 10,000's of law enforcement officers and other investigators annually
- Champlain faculty and students are providing
  - Curriculum development of "real-world" scenarios for use in NW3C courses
  - Development of IoT security courses
- Multi-year funding through a DoJ Grant

Professional Services
- Champlain students are providing direct IT and cybersecurity support to a number of Vermont non-profits
- Organizations contract with the Center for services
- Center has the capacity to help more organizations!

Leahy Center at Champlain College

Thank You!

Adam Goldstein

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