Institute for Cyber Security
Overview

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MISSION
Excellence in graduate-level sponsored research

2007-2012
Founded by start-up funding from State of Texas

2012-2017
Graduated to a self-sustaining operation

2017-2022
Major expansion by winning NSF C-SPECC grant

FlexCloud & FlexFarm
World class research laboratories
Sustained production of PhD graduates and sponsored research

In collaboration with:
College of Engineering
College of Business
College of Education
Open Cloud Institute
Cyber Center for Security & Analytics

Partnership with 4 NISD High Schools:
Harlan, Woodson, Taft, Business Careers

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Holistic Cyber Security Research

Objectives

Enable

Enforce

POLICY

What?

ATTACKS

Why?

Respond

Defend

Mechanisms

P R O T E C T

How?

Complement

D E T E C T

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World-Leading Research with Real-World Impact!
Requires

Institute Level Effort
World Class Laboratories
Global Collaborative Connections
ICS Major Research Thrusts

APPLICATION DOMAINS
Cloud Computing, Internet of Things (IoT), Social Media, Big Data, Mobile Platforms, Enterprise, Insider Threat, Scientific Infrastructure, Smart Homes, Smart Cities, Smart Cars etcetera

FOUNDATIONAL TECHNOLOGIES
Access Control, Policy, Malware, Forensics, Blockchain, Artificial Intelligence, Machine Learning, Data Provenance, Formal Methods etcetera

WORLD CLASS LABS
FlexCloud
Flex Farm

Goal: Broaden and Deepen
PAST SYNOPSIS

- PhDs graduated: 25
- External funding raised: $22M

CURRENT STATUS

- Faculty affiliates: 20
  - College of Sciences: 8, Engineering: 5, Business: 5, Education: 2
  - Includes 6 with research fully managed through ICS
- Current PhD students: 32
  - College of Sciences: 22, Engineering: 7, Business: 2, Education: 1
  - Domestic: 17
  - Foreign: 15
- Current non-PhD students: 8
  - Domestic: 7
  - Foreign: 1