

# ALABAMA CFI

COMPUTER FORENSICS INSTITUTE

**ANNUAL REPORT FOR FISCAL YEAR 2014**









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ALABAMA



COMPUTER FORENSICS INSTITUTE



# 1 Foreword

The Alabama Computer Forensics Institute (ACFI) and Cyberkids program seek to offer a unique, applied method of addressing a global problem. The prevalence of technology-based crimes is growing each year; similarly, the inclusion of technology into everyday tasks has become a foregone conclusion. As we develop into a more technology-dependent and driven society, we must acknowledge the need for timely and adequate training in matters related to cybercrime.

The ACFI has worked for over a decade to combat cybercrime in the Southeast. Our training and awareness programs have proven beneficial to first responders, investigators, law enforcement officials and legal representatives. Not only were ACFI and Troy University the first groups in Alabama to promote the need for properly-trained representatives, but, we have served as advocates for safe computing and the protection of our most precious resource: our children.

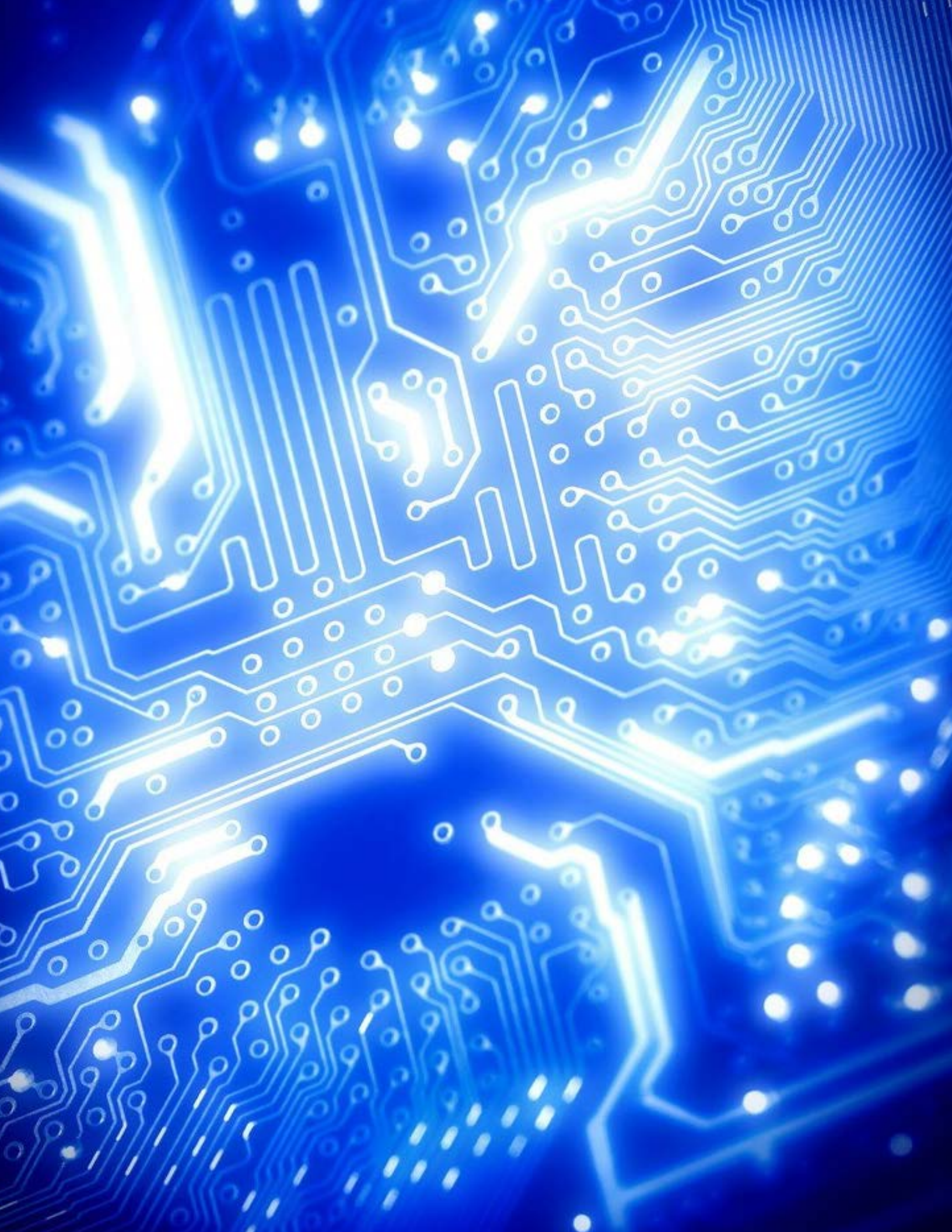
**W. Greg Price, Sr., Ph.D., CTO**  
Alabama Computer Forensics Institute

Long before most were aware of cybercrime, cybersecurity, ACFI and Troy University were leading the efforts regionally to bring training and assistance to field representatives. Now, many organizations discuss the importance of battling cybercriminals and training representatives in digital forensics. Experience is a valuable asset in the technology sphere. ACFI and Troy University are the only organizations in the Southeast to be nominated for national performance awards for the best IT security teams, security training and efforts to protect the welfare of the nation's youth through innovative use of technology.

ACFI and Troy University continue their pioneering efforts in cybersecurity through training programs, evidence examination, research and hands-on, applied approaches to the growing problem of cybercrime. We don't talk about the problem, we produce tangible efforts that benefit our citizens.









## 2 Introduction

The Troy University IT department manages a global technology infrastructure that encompasses more than 50,000 end-users in 16 time zones. The team leverages a state-of-the-art facility at Troy, Ala. in a global community. The data center in University Park near downtown Troy is an exemplary facility, protected by an elaborate array of redundant infrastructures and health-monitoring devices. Awards for Best IT Security Team in the United States – the only higher education team recognized and received the 2012 and 2013 Honors Laureate. In 2015, the team was recognized as the 2014 Best IT Security Team in the U.S.

Nationally recognized as a leader in IT security, TROY IT has been a finalist for three consecutive years in the S.C. Magazine Awards for Best IT Security Team in the United States – the only higher education team recognized and received the 2012, 2013 and 2014 Honors Laureate. The IT team supports all functions of the University and is progressive in fostering educational opportunities for staff development.

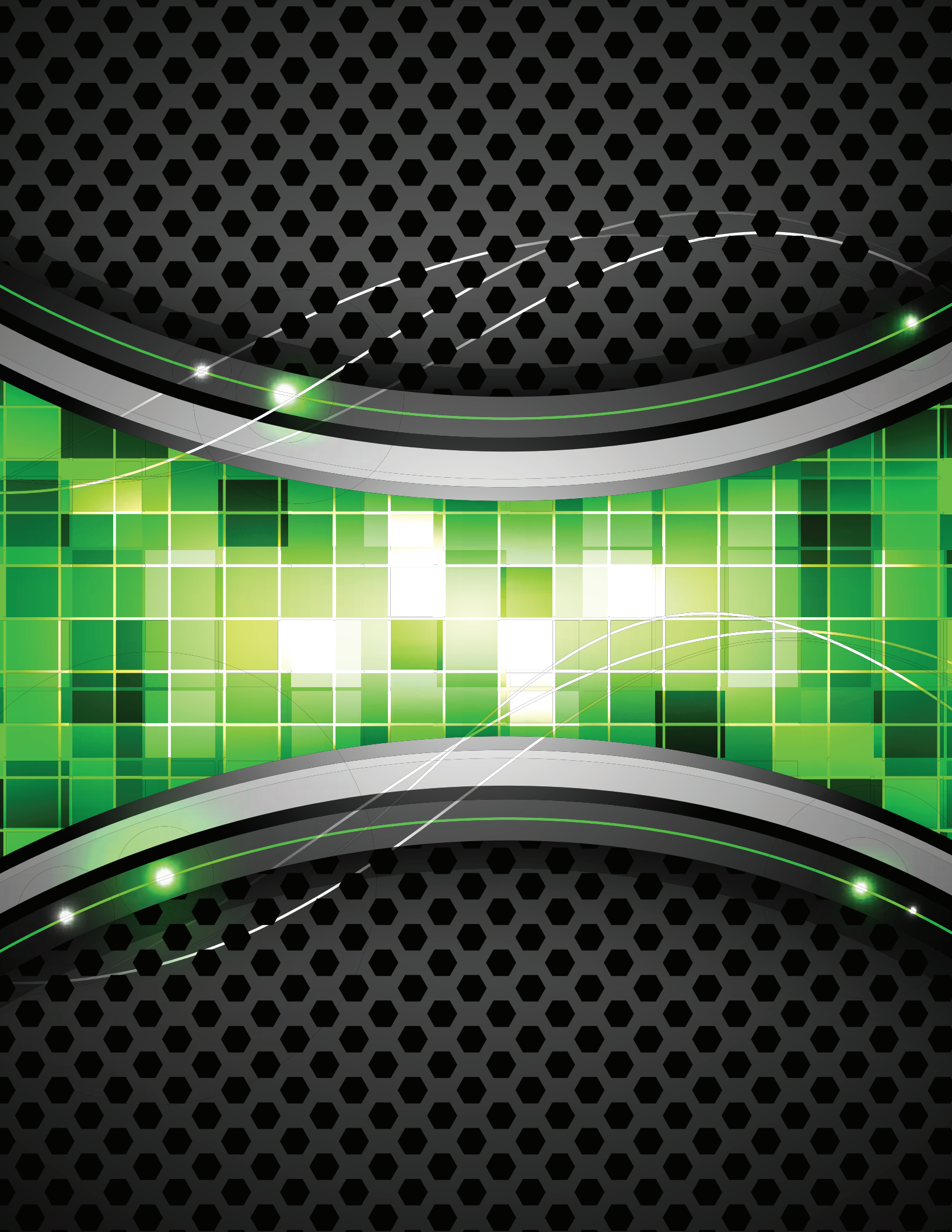
An annual IT Summit provides scores of training sessions and collaborative opportunities to assist in annual planning of technology initiatives. Since construction in 2009, services from the technology facility have achieved an uptime of 99.995%. In 2008, the Troy University IT department launched a community service program with the Alabama Attorney General's Office. The Cyberkids Internet Safety initiative has met tremendous success. Since the first presentation in 2008, the group has traveled more than 70,000 miles and more than 295,000 youth and adults have participated in the events. Troy IT staff have spoken at a wide-variety of school, civic and community events. In addition to tailored Cyberkids presentations, the group offers events on identity theft and maintains a public information website, [www.whoswatchingalabama.org](http://www.whoswatchingalabama.org).

By capitalizing on tremendous experience in information security, in 2006, the Troy University IT department launched the Computer Forensics Institute and Lab. The U.S. Department of Justice funded program trains law enforcement officers in digital forensics, electronic evidence collection and advanced investigative techniques. Through collaborative efforts with federal, state and local law enforcement groups, the Computer Forensics Lab serves as an electronic evidence processing center. Having processed more than 1,200 pieces of computer and other electronic evidence items year-to-date, the facility has proven to be an instrumental support agent in regional criminal investigations.

The team members possess significant data security and digital forensics acumen. Team members have authored IT security books, lead security conferences, developed the ADMIT framework, two provisional technology patents and progressed the layered security model that is employed by progressive security firms internationally.









## 3 Mission

The primary mission of the Alabama Computer Forensics Institute is to meet the digital forensics needs of agencies and departments throughout the state of Alabama. The ACFI's casework is prioritized according to the scale and time-sensitivity of the crime under investigation.

The ACFI's mission requires the availability of highly-trained and well-equipped digital forensics examiners to support federal, state, and local investigations and prosecutions. In this capacity, the ACFI assists with the seizure of digital evidence; conducts impartial and objective analysis of digital evidence using the best available tools and procedures available.

ACFI is widely-revered as advocates of child safety. Much of our work involves child exploitation, accomplished through illegal, inappropriate use of technology. Online predators pose an ever-present risk to our children. Our significant experience in processing and analyzing seemingly disparate electronic media has proven instrumental in convicting numerous child predators.









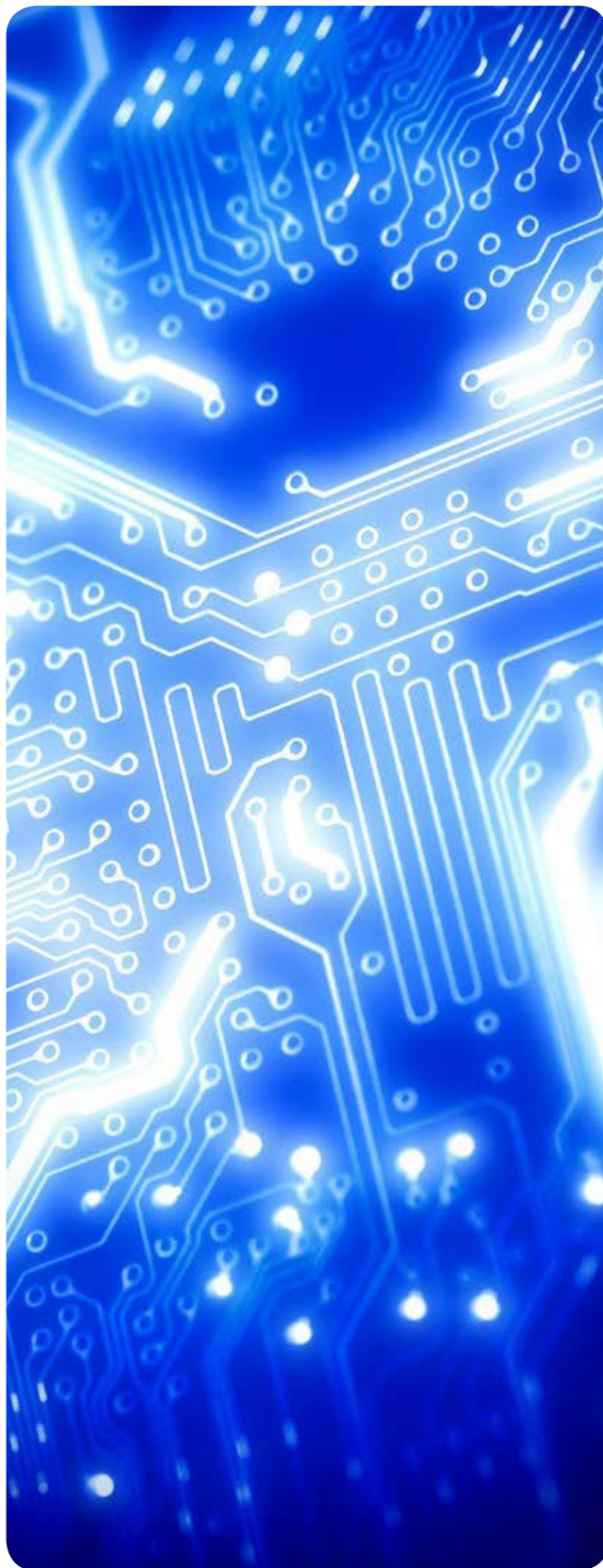
## 4 Staffing

The ACFI is equipped and staffed to recover, examine and process digital evidence. Additionally, the ACFI maintains a research component. Through evaluation of digital investigative tools and techniques, ACFI enhances digital forensics methodology and leverages unique cyber-security knowledge to create a dynamic approach to computer forensics and cyber threat mitigation.

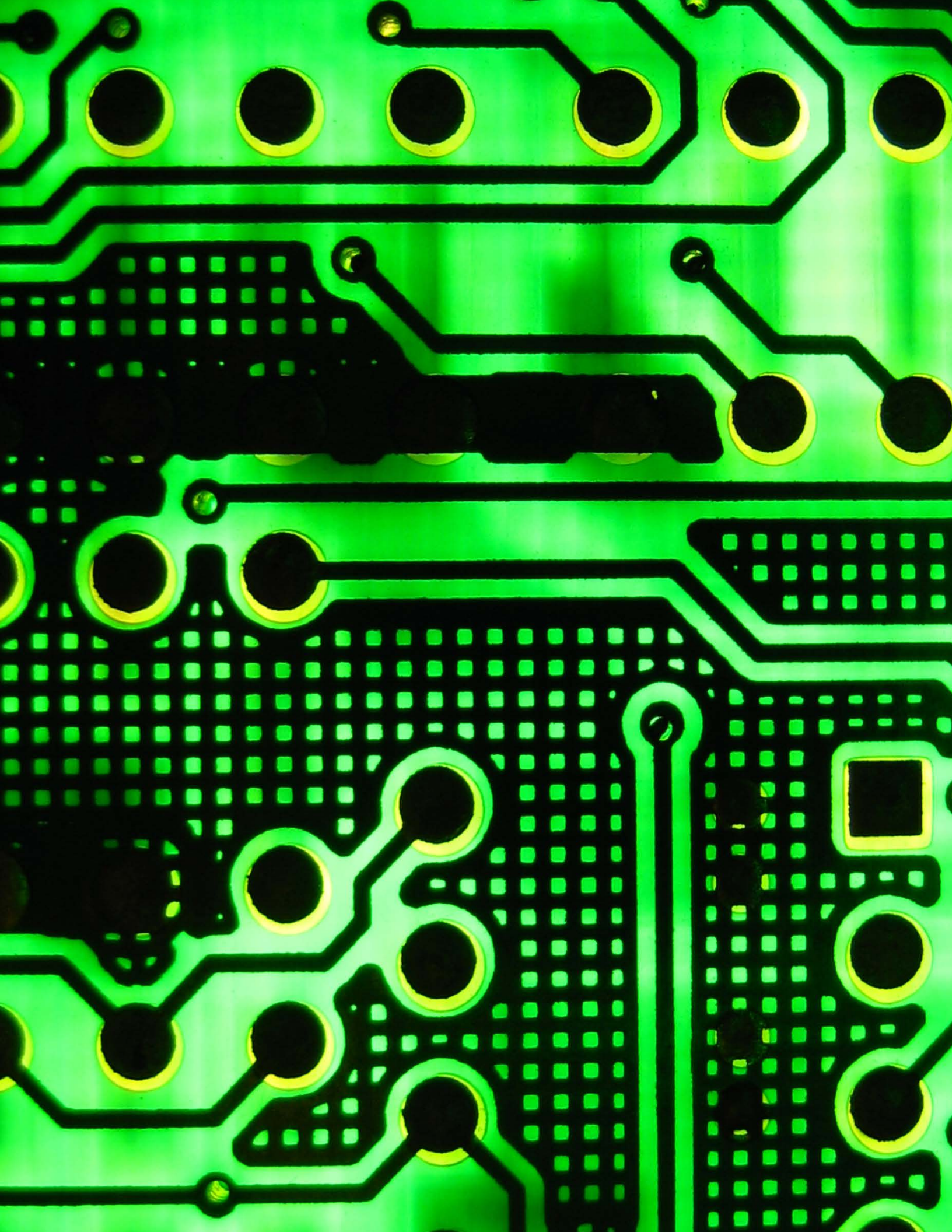
ACFI consists of a Director, Assistant Director, Operations Coordinator and four examiners. The team is certified in a wide-variety of computer forensics tools, protocols and industry-standard software solutions. In all, the team possesses over 100 years of information security experience, thirty certifications and 3,000 hours of hands-on forensics training. ACFI has processed over 1200 pieces of digital forensics evidence, assisted law enforcement in the conviction of 127 individuals, and spoken to over 250,000 conference attendees.

### SUPPORT ASSOCIATES

- Troy University
- Alabama Attorney General's Office
- Alabama Bureau of Investigation
- Alabama Department of Public Safety
- Alabama Department of Homeland Security
- United States Marshals Office
- Federal Bureau of Investigation
- United States Department of Justice
- Naval Criminal Investigative Service, Atlantic Cyber Division
- City and County Law Enforcement Units









# 5 Training

Cyberkids is a public outreach effort of the Alabama Computer Forensics Institute (ACFI) and Troy University. The program began in 2006 as a partnership with the Alabama Attorney General's Office and Alabama Department of Public Safety. Through use of ACFI's extensive field experience and specialization in Internet Crimes Against Children, a series of awareness training events were scheduled throughout Alabama. The events were a major success.

Within a few months, we received scores of requests from school and civic organizations. ACFI has presented Internet safety workshops to hundreds of thousands of youth and adults throughout Alabama and the Southeast. We are frequent speakers at law enforcement and school associations.

In addition to the Cyberkids program, we offer free training to numerous law enforcement agencies. The range of topics we discuss is diverse. Issues related to cybersecurity, cybercrime, human trafficking, social media attacks, cyberbullying, public asset protection, cyber incident handling and cyber policy development are popular. Furthermore, we offer tailored training for special activities and onsite, hands-on training of digital forensics gear.



# Forensics Training

## **CYBER SECURITY**

We offer a wide range of cyber security training opportunities for law enforcement and first responders. Please contact us for more information.

## **MOBILE FORENSICS**

The prevalence of mobile devices (cell phones, smart phones, etc) has lead to an increase in their use in violent and non-violent crimes. The Alabama Computer Forensics Institute provides training programs that will show law enforcement and first responders the methods used to process these devices for evidence collection. Contact the ACFI for more information.

### **CF-001 COMPUTER FORENSICS PRIMER**

This course is an 8 hour course designed for law enforcement training facilities. It provides an introduction to computer forensics without some of the more technical aspects and exercises in our other courses.

### **CF-100 COMPUTER BASICS**

This course is an optional precursor to CF-101. It is recommended for anyone who feels they need some basic computer instruction before taking the other courses.

### **CF-101 INTRODUCTION TO CYBER CRIME**

This course provides a basic understanding of computer crime, a detailed “bag & tag” instruction and introduction to some of the hardware and software available for computer forensics.

### **CF-102 FORENSICS TOOLS & TECHNIQUES**

This course provides an in-depth session on the tools and techniques used for investigation of computers in criminal cases.

Prerequisite: CF-101

### **CF-203 PRACTICAL TRAINING IN FORENSIC INVESTIGATIONS**

This course provides a hands-on experience in a working forensics lab with an active forensics examiner/investigator as a coach.

Prerequisites: CF-102

### **CF-204 SEARCH AND SEIZURE OF COMPUTERS AND ELECTRONIC EVIDENCE: LEGAL AND TESTIMONIAL CONSIDERATIONS FOR LAW ENFORCEMENT**

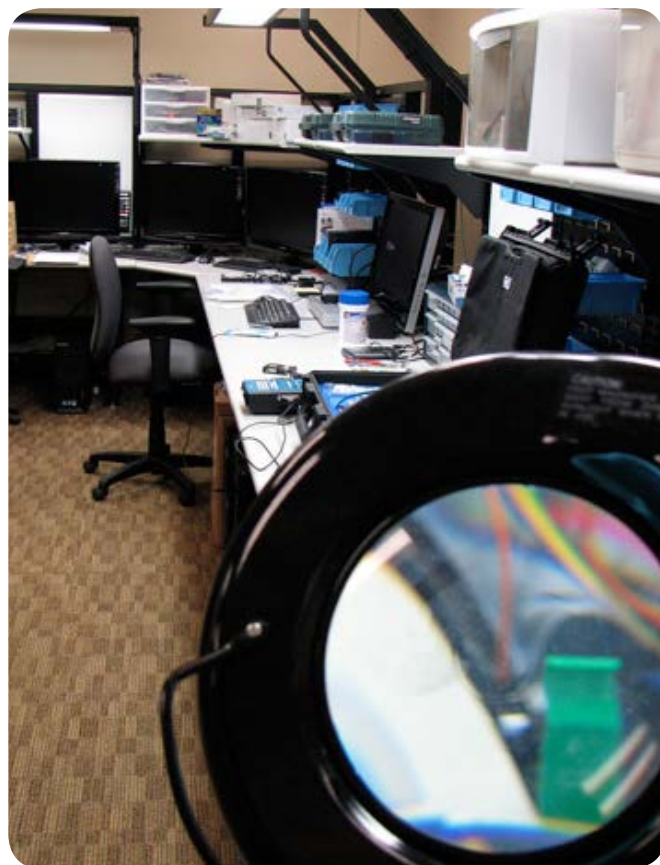
This course will cover the legal aspects of search and seizure with respect to computer evidence. Warrant writing procedures and common pitfalls will be discussed along with appropriate laws to govern computer crime.

### **CF-205 SEARCH AND SEIZURE OF COMPUTERS AND ELECTRONIC EVIDENCE: LEGAL CONSIDERATIONS FOR TRIAL JUDGES**

This course will cover the legal aspects of search and seizure with respect to computer evidence, specifically for trial judges.

### **CF-510 SPECIAL SEMINAR**

These seminars are one day special topic lectures. Announcements for these seminars are made through our mailing list, and any law enforcement officer is welcome.





# Public Outreach Training

## **CYBERKIDS SERIES – HELPING PROTECT ALABAMA’S YOUTH**

The Cyberkids programs offer insightful and current information to children and adults. The interactive presentations frame the problem of internet safety and offer a course of action for protecting oneself in our increasingly connected world.

## **LAW ENFORCEMENT SPECIAL TOPICS SERIES – ASSISTING LAW ENFORCEMENT THROUGH AWARENESS**

ACFI conducts onsite and online training for law enforcement. The event topics are varied. Recent topics include: cyberbullying, digital evidence preservation, digital evidence collection, identity theft techniques, free digital tools: a guide, secure schools: a framework for safety, mobile digital forensics techniques, digital surveillance approaches

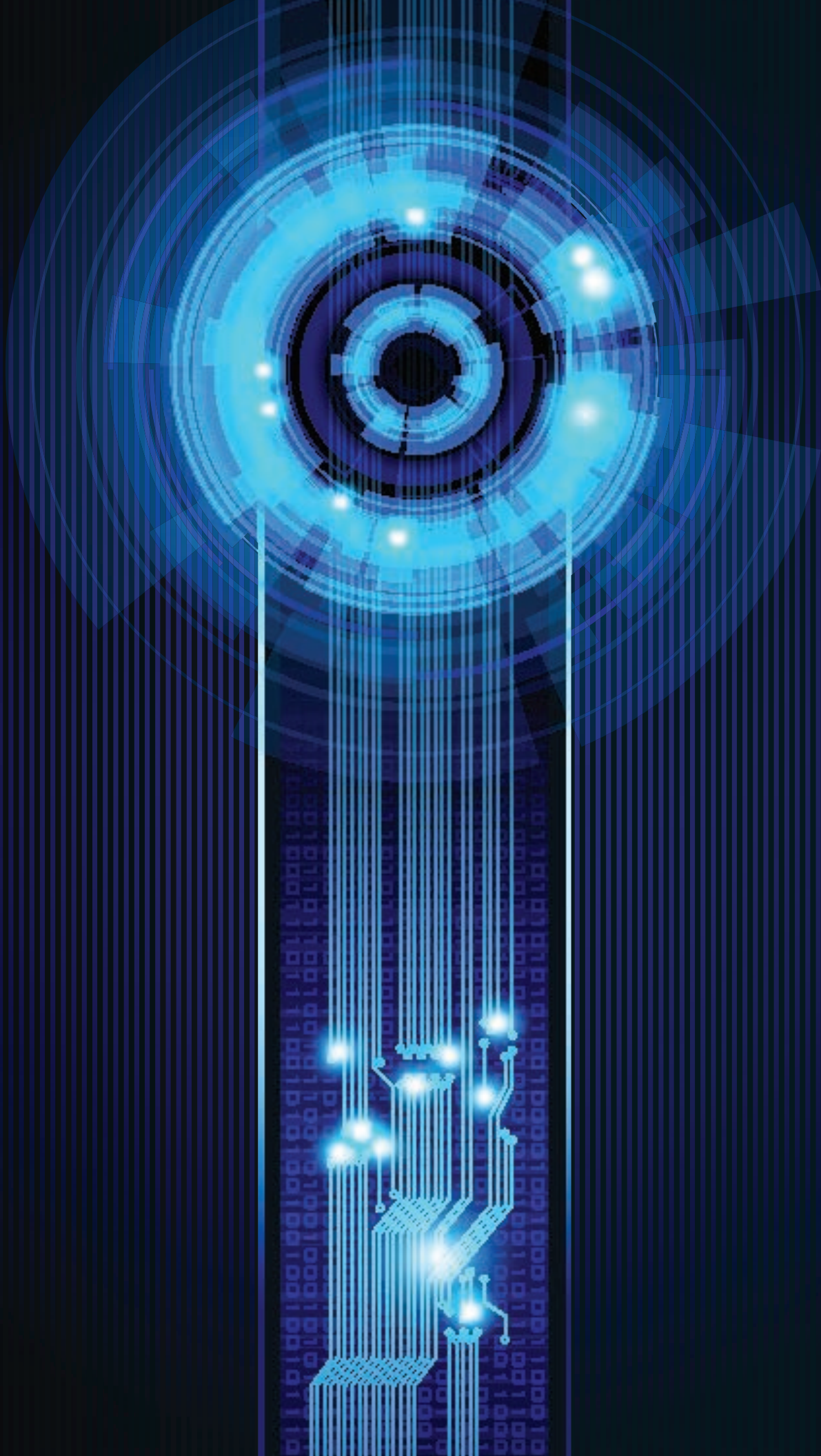
## **SCHOOL OFFICIAL SERIES – TRAINING ALABAMA’S EDUCATORS TO BE SAFE AND PRODUCTIVE IN A DIGITAL WORLD**

ACFI conducts teacher in-service training throughout the state. The training describes issues that confront most teachers and school officials in our technology-dependent world. We offer best practices, guidance on legal and policy matters and conduct situational awareness activities that portray common scenarios that the modern educator must handle.

## **DISASTER PREPAREDNESS TRAINING – ELECTRONIC BUSINESS AND SERVICE CONTINUITY SEMINARS**

ACFI and Troy University IT host a series of informative lectures on properly securing digital assets. The program is designed to address the problems of data sprawl, data loss/leakage and disaster management. Through real-life depictions of events, we offer frameworks for proper management of resources during turbulent times.





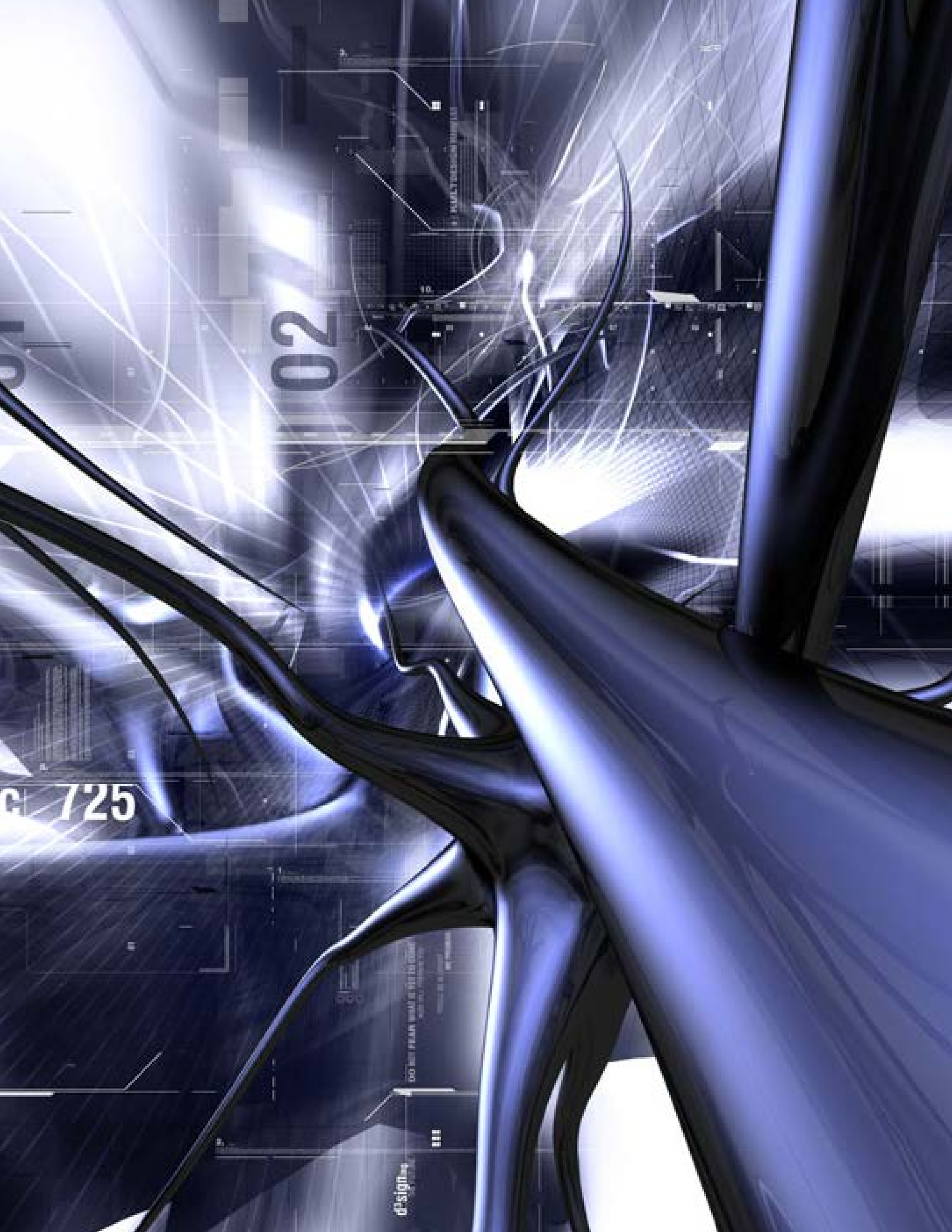


# 6 Funding

The Alabama Computer Forensics Institute is funded by Edward Byrne Memorial Justice Assistance grants and Troy University.

Additionally, generous donations of equipment from numerous digital forensics and technology firms have established a robust digital forensics laboratory and a mobile cybercrime field laboratory.





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# 7 Facility

## INFORMATION TECHNOLOGY CENTER

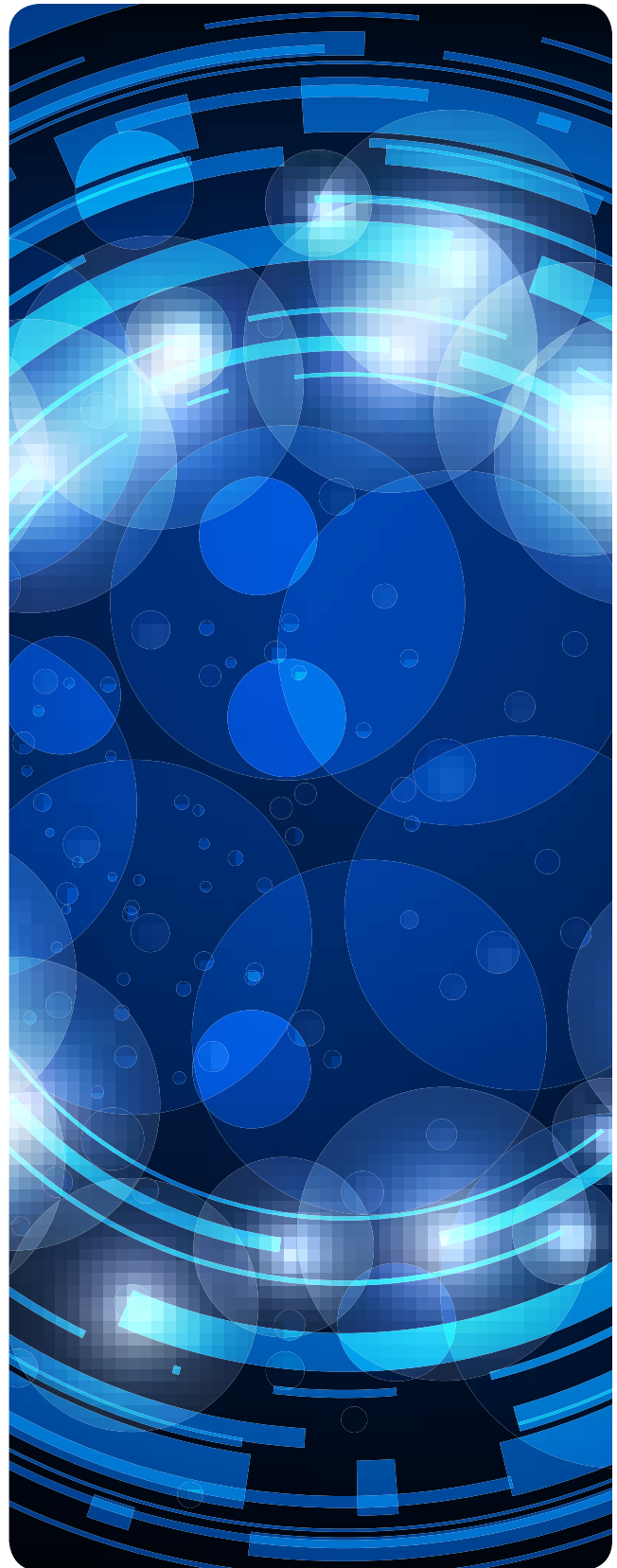
- 20,000 square feet office space
- 4,000 square feet dedicated training facility
- Secure access, CCTV-monitored
- Designed for extended stay, disaster recovery site
- SC Award Finalist 2009, 2010, 2011, Winner 2014

## IT DATA CENTER

- 3,000 square feet, raised floor
- Redundant, Parallel conditioned power
- On-premises generator, redundant power feed
- Fail-over, redundant path electrical and data circuits
- Triple HVAC system
- Five-alarm fire suppression system, Secure Access, CCTV
- ISO 27000 series compliant, TIA 942 compliant, Tier 4 facility

## COMPUTER FORENSICS INSTITUTE

- \$1 million state-of-the-art digital forensics laboratory
- Redundant, Parallel conditioned power
- Secure access, CCTV-monitored, vaulted evidence lockers
- Mobile lab-equipped for on-site services and evidence seizure
- 2 provisional patents for cyber-analysis tools
- Real-time, interactive, online evidence tracking interface for investigators







# Accomplishments

## ACCOLADES & AWARDS

- 2014 SC Awards Best Security Team in U.S.
- Computerworld 2014 and 2013 Honors Laureate Award Recipient
- Certified Forensics Examiners, GCFA, ACE, GCIH, SSI, GPEN, SMSP
- Certified Digital Examiners, Certified Malware Examiners
- Certified Systems Engineers
- Members: The American College of Forensics Examiners,
- The American Board for Certification in Homeland Security,
- FBI-Infragard, ISACA, High Technology Crime Investigation Association,
- The International Association of Computer Investigative Specialists (COPS),
- The Institute of Computer Forensics Professionals, IEEE
- Department of Justice-funded Computer Forensics Institute
- State and Federal court-qualified forensics expert witnesses
- Founders of the River Region FBI-Infragard Members Alliance

## 2014 ACTIVITIES

- 65 Conferences and Training Events
- 45,000 Attendees
- 250 Digital Evidence Processed

## FOR MORE INFORMATION

To review the latest updates about the Alabama Computer Forensics Institute, including information regarding training offerings, upcoming events, subscribe to newsletter/alerts or request a follow-up, please follow this link: <http://www.whoswatchingalabama.org>



# Accolades & Awards





# Letters from Students

Cierra McCallough  
35 County Rd. 400  
Opp AL, 36467

Dear Mr. Price,

Thank you for teaching me about Cyberbullying. I understand everything that u taught us. Especially about this guy that's 40 but pretends to be 13. In those videos that was a good example of cyberbullying. I really enjoyed it.

Thank you,  
Cierra

Dear Mr. Price,

Thank you so much for the presentation. I appreciated it so much. I have learned that cyberbullying is nothing to mess around with because it could cause some one to really hurt themselves. I have also learned that nothing is free on the internet. Also, that on Facebook who you think is a 14 year old boy or one of your friends, it may be just be a 40 year old guy.

Sincerely  
Laven McBride

Dear Mr. Price I wanted to thank you for the presentation on cyberbullying. You have opened my eyes to a lot of things about the internet. I now know not to believe people you do not know and never give out personal information to anyone. Also if you get cyberbullied or see someone get cyberbullied then tell an adult. Most importantly don't cyber bully cause it can lead to kids taking their own lives. Like I said thank you for sharing these facts with me.

Sincerely, Dawson Odom

Dear Mr. Price and your team,

Thank you for coming to Kinston and showing us about the internet. I will tell my mom and step-dad to go to [www.whoswatchingAlabama.org](http://www.whoswatchingAlabama.org). I am a little scared about having a face book, but I will be careful what I put on face book, or anything. But I might get a DSI for Christmas and if I do get internet I will be really careful what I put on the internet. But I had fun learning about the internet. Please come back soon.

Your Friend,  
Morgan Wilson

Dear Mr. Price,

Thank you for informing me about Facebook and the predators and what they do. Thank you for coming to our school. But most of all, Thank You for informing us about how to stay safe.

Yours truly,  
Kennedy

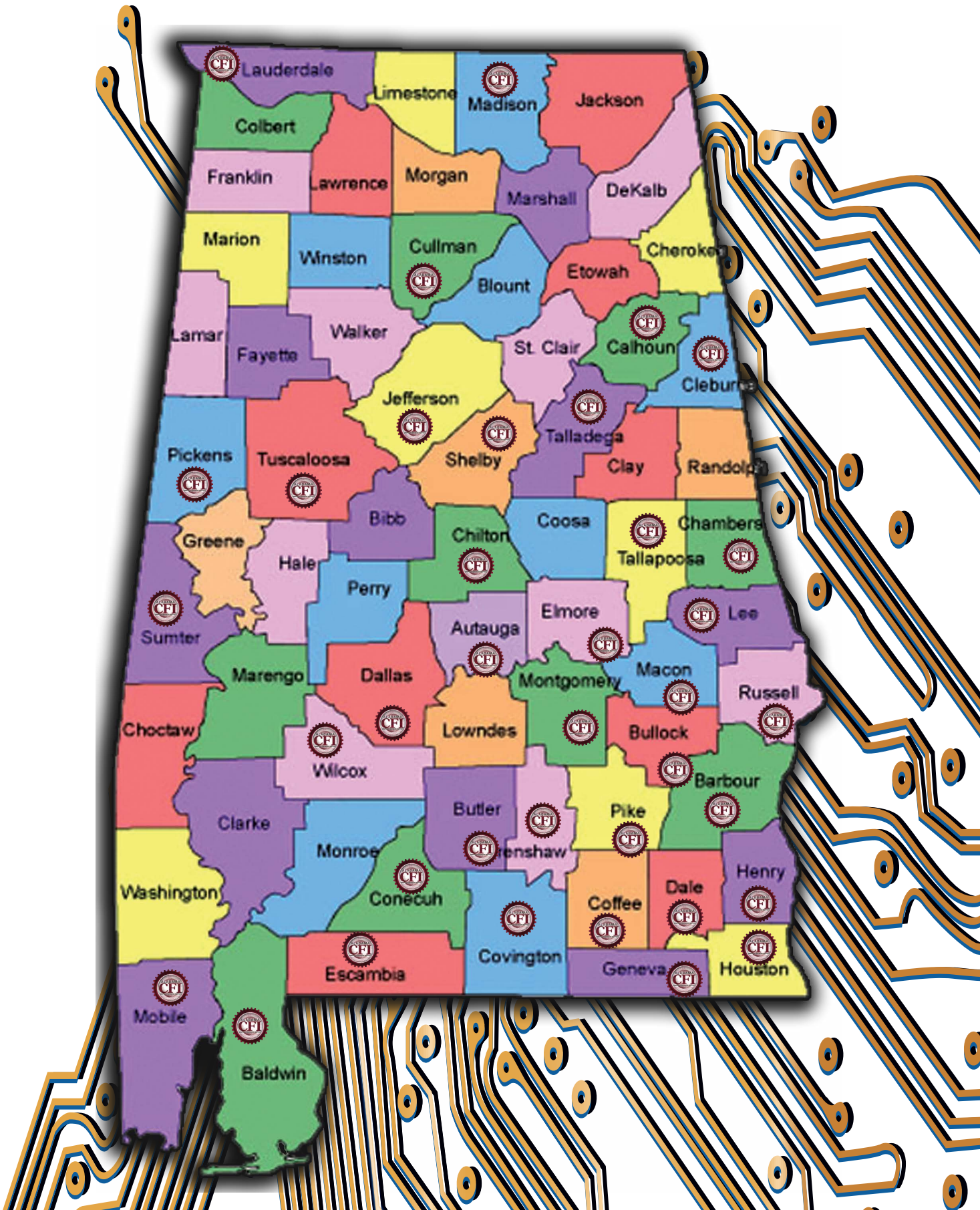
Dear Mr. Price

Thank you for coming to our school and showing us about all the dangers that we have on our computers. I am going to tell my mom and dad so we can be protected. I really appreciate all the work you did today because it taught me alot! You also told me about cyberbullying and how it causes people to want to commit suicide. You really made me rethink things and to be more cautious! Thank you so much! I also wanted to thank you for giving us alot of details cause that helped me understand it more! You are really good at what you are doing so keep it up!

Sincerely,  
Kaitlyn Richardson



# Counties ACFI covers through our **Cyberkids Protection Initiative**





# State of Alabama

## House of Representatives Resolution

State of Alabama  
House of Representatives



MONTGOMERY, ALABAMA

### Resolution

HR486

By Representative Alan Boothe

**COMMENDING THE ALABAMA COMPUTER FORENSICS INSTITUTE AT TROY  
UNIVERSITY FOR DISTINGUISHED SERVICE TO ALABAMA**

WHEREAS, the Alabama Computer Forensics Institute was founded in 2006 at the Information Technology Department at Troy University both to aid law enforcement in criminal investigations and to educate the general public on the prevention of cybercrime; and

WHEREAS, to date, the Institute has assisted all levels of law enforcement, both state and federal, on more than 400 separate investigations; and

WHEREAS, the Institute has developed a nationally recognized program, called Cyberkids, designed to educate young people about the importance of cybersecurity, and has presented this program to more than 120,000 young Alabamians; and

WHEREAS, the Institute has received several national honors for its work, including the 2012 Computer World Honor Laureate for Advancement of Technology for the public welfare; now therefore

BE IT RESOLVED BY THE HOUSE OF REPRESENTATIVES OF THE LEGISLATURE OF ALABAMA, That the Alabama Computer Forensics Institute at Troy University is commended and thanked for its service to Alabama education, and it is further directed that the Institute receive a copy of this resolution as evidence of our appreciation and admiration.



I hereby certify that the above resolution was adopted by the House of Representatives of the State of Alabama on this the 16th day of May, 2012.

A handwritten signature in blue ink, appearing to read "Greg Pappas".

GREG PAPPAS, CLERK





2013 CW Honors Laureate Gala  
**Meeting with Vint Cerf**



2013 CW Honors Laureate Gala



2013 CW Honors Laureate Gala



2013 CW Honors Laureate Gala



2013 CW Honors Laureate Gala



Jim Byard from ADECA  
visits ACFI





State Representatives  
**Visit ACFI**



Auburn University  
**Cyberbullying Conference**



University of Alabama  
**Children's Conference**



Cyberkids presentation to teachers  
**Ashford Schools**



Cyberkids presented to law enforcement  
**Eufaula Middle School**



Cyberkids presentation to teachers  
**Houston County Schools**





## ACFI

**CYBERKIDS INITIATIVE  
COMPUTER FORENSICS  
CYBER THREAT ANALYSIS**

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**WHOSWATCHINGALABAMA.ORG**

### **CONTACT US**

110 University Park  
Troy, AL 36082  
Attn: ACFI

### **WEBSITE:**

**[www.whoswatchingalabama.org](http://www.whoswatchingalabama.org)**

### **TELEPHONE:**

**334-670-3133**