

# Screening IA Students for Criminal Backgrounds

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***Abstract – Colleges and universities that teach Information Assurance (IA) skills are beginning to address the ethical issues associated with this academic discipline. There is a potential that IA skills might be misused to commit criminal or terrorist acts. Schools are beginning to consider the financial and ethical liabilities of their students misusing the technical, business, and legal skills that they learned at that school. One dilemma facing educators is whether a student with a criminal background will revert to criminal behavior and use their newly acquired IA skills for illegitimate purposes. Having criminals with the same knowledge and skills as the professionals investigating their illicit activities will seriously complicate solving these crimes [1].***

***Universities have a responsibility to the surrounding community and cannot assume that their students are capable and experienced enough to make sound ethical judgments. Some schools and Centers of Academic Excellence have begun to investigate the backgrounds of their incoming students. This research project examines the current state of the practice for screening applicants to IA programs and the faculty attitudes toward screening students with criminal backgrounds.***

**Index terms – criminal background checks, information assurance education, admission policy**

## I. INTRODUCTION

When an individual commits a crime, they are subjected to various social sanctions for retribution, rehabilitation, restraint, or deterrence [2]. Some of these sanctions are punitive and some involve losing the rights that other citizens in the United States (US) have such as the right to vote or bear arms [3]. Some of the sanctions go so far as to restrict the possession and use of telephones [4]. Some colleges and universities in the US have begun screening students with criminal backgrounds from selected academic programs while others have done this for many years. Students are finding that being denied admission to an educational program may be one of the sanctions that they face for having committed a criminal act [5]. Receiving an education is a privilege and not a right. The federal government has supported the view that obtaining an education is a not a right [5].

Some schools are beginning to conduct criminal background checks on students who apply for admission. These background checks may be conducted by the school, law enforcement agencies, or private contractors.

Schools that conduct their own criminal background checks may do so by accessing a national criminal database (NCD) [6]. One major problem with these NCDs is that they are often incomplete and may not contain critical information or contain the crimes committed by an applicant. Not all counties or other jurisdictions report violators to the database managers. To address these shortcoming, criminal backgrounds can be conducted by a private vendor with access to more complete information from multiple criminal jurisdictions [6; 7].

This study was undertaken to determine the state of the practice in screening applicants to IA programs. The project also attempted to collect information on the subjective opinions of faculty regarding screening practices. The information collected provides an insight into how different programs admit students and how different faculty feels about it.

## II. CRIMINAL BACKGROUND SCREENING

Our society has become extremely litigious and many people and organizations act proactively to limit their legal liabilities. Schools are following this trend and are taking steps to limit their liability by minimizing their exposure to preventable risks. Screening incoming students, staff, and faculty members is one method of reducing exposure to future risk.

### *A. Academic Programs that Screen Student Applicants*

Information Assurance is not the first or only academic discipline that faces an ethical dilemma when screening applicants into their programs. Other disciplines have addressed this problem by conducting background checks and blocking some students from admission into their programs.

Due to a string of abusive incidents and expensive lawsuits, there is a growing trend to screen students in healthcare programs for past offenses [8]. Early in 2006, the Association of American Medical Colleges (AAMC) decided to approve a system for conducting criminal background checks on medical school applicants [9]. The

AAMC's system was launched as a pilot program with ten schools in the summer of 2007 after which it became available to all 125 member medical schools for use in screening the incoming class of 2009. The AAMC advisory committee is recommending that their member medical schools develop tailored admission policies on which criminal acts would impact admission to their school. The committee also recommends that violent criminal acts should definitely be considered during admissions deliberations. Many medical schools screen their students for criminal backgrounds [9]. Some schools such as Howard College have chosen to ask their applicants to voluntarily disclose past felony arrests and convictions [9].

Graduates of nursing schools that want to work in the state of Illinois are required by the Nursing and Advanced Practice Nursing Act to undergo a criminal background check before they can receive a nursing license. Nursing schools are concerned about negative publicity and the reputation of their schools if their graduates were discovered to have criminal backgrounds [8]. Farnsworth and Springer [10] conducted a study of 258 schools with nursing programs and found that 38% of the schools conducted background checks with another 7% planning to begin conducting background checks. This study also found that an additional 14% of the nursing schools ask students to voluntarily disclose information about prior criminal convictions [10]. Background checks are done because of state law, state board of nursing requirements, and because some healthcare facilities require them before accepting clinical placements from the schools [10].

Lawyers in several states are unable to obtain a license and practice law if they have one or more felony conviction. For example, the Oregon State Bar refused to grant a recent law student a license to practice law in the state of Oregon after a felony conviction [5]. Counseling education programs screen applicants at some schools. Erwin & Toomey [11] surveyed 50 of the 172 counseling education programs accredited by the Council for Accreditation of Counseling and Related Educational Programs and found that 13.5% of these programs were screening applicants with criminal backgrounds.

### *B. Occupations that Screen Applicants*

Not all professions are open to workers with criminal backgrounds. Some professions, such as finance, have licensure requirements to block workers with criminal backgrounds from obtaining a professional license issued by state or national organizations [12]. For example, the insurance industry is moving towards criminal background checks to raise the reputation of that profession to at least the same level as commercial banking and the financial securities industry [13].

The state of Florida has required insurance agents to be fingerprinted and undergo criminal background checks since 1990 [14]. The Council of Insurance Agents and Brokers unanimously supported a position that all insurance agents and brokers be required to undergo a criminal background check [13]. The council felt that this would improve the respectability of their profession and move insurance professionals to the same level of credibility as commercial bankers and securities professionals. In 1995, Florida found that 3.7% of applicants had attempted to conceal criminal backgrounds. Texas began screening applicants for insurance licenses in 1995 [14]. Texas denies insurance licenses to individuals with felony convictions.

Nurses with murder, retail theft, or delivery of controlled substance convictions in the state of Illinois are required to obtain a waiver before they are allowed to practice in the state [8]. The Illinois state police conduct the background checks in an effort to protect patients in vulnerable situations from their caregivers [8].

The Commonwealth of Pennsylvania attempted to require a criminal background check of everyone working as caretakers of elderly citizens at covered facilities in the Commonwealth [15]. The Commonwealth's goal was to protect older adults that were unable to protect themselves.

Pharmacy technicians are being screened for criminal backgrounds. The president of the National Community Pharmacists Association and the executive director of the National Association of Boards of Pharmacy (NABP) have both stated that it is critical to conduct criminal background checks [16]. The NABP has called on its member boards to prevent criminals convicted of drug-related crimes from obtaining employment in the pharmaceutical industry [16].

The U.S. Department of Defense (DoD) requires a background check to prevent contractors with criminal backgrounds from supporting U.S. troops around the world [17]. The DoD initiated background checks after realizing that contractors presented very real threats to the safety and security of American troops and installations. In some areas such as Iraq and Afghanistan, the DoD uses biometric authentication to identify criminals and terrorists [17]. Screening foreign workers for a criminal background is more challenging and takes longer to complete than similar screening in the U.S. [18]. Some foreign countries do not have systems for tracking criminal offenses and some have privacy laws that prohibit exporting information on their citizens [18].

The State of New York requires security guards to hold state-issued licenses and undergo federal criminal background checks [19]. New York required this after the

September 11 terrorist attack and is an attempt to monitor and control who holds these sensitive security jobs. In 2004, there were 132,000 licensed security guards in New York state [19]. Other states are prohibiting workers with criminal backgrounds from obtaining public employment [12].

The Certified Information Systems Security Professional (CISSP) certification is the most widely accepted certification in Information Assurance. More than 70% of security jobs posted online ask for the applicants to hold a CISSP certification. To apply for the CISSP certification, an applicant must answer questions about their criminal backgrounds [ISC]. (ISC)<sup>2</sup>, the organization that sponsors the CISSP certification offers a scholarship program to promising post-graduate students that also asks applications if they have a criminal background.

Colleges are beginning to screen applicants for faculty and staff positions for criminal backgrounds [20]. A study conducted by Van der Werf found that 26% of public colleges and several private colleges are already checking their faculty for criminal backgrounds. In several cases, schools have been held liable for the actions of faculty members under the doctrine of “negligent hiring” [21]. In some states, employers can be held liable for not conducting a routine background check [12]. Employers are screening applicants for a variety of reasons including: protecting their customers, minimizing workplace violence and drug use, and to meet the legal requirements of the states they operate in [6].

Schools and businesses need to be careful when screening job applicants. Organizations must be able to demonstrate that a sound business justification exists before beginning to screen out applicants [22]. The Equal Employment Opportunity Commission requires employers to consider the type and severity of crime committed along with the amount of time that has passed since the crime was committed before denying employment [22; 10]. Employers have to be able to demonstrate the crime relates to the job being sought by an applicant.

### *C. The ethical dilemma*

Schools cannot assume that their students and graduates will always act in an ethical manner and only apply their newly acquired knowledge for the benefit of society [23]. IA students may need to be screened to prevent students with criminal backgrounds from being admitted. Students may need to pass a background check and pass psychological testing before being admitted to IA programs. These basic precautionary actions might screen out dangerous students [23].

There is a strong tendency for criminals to revert to prior criminal behavior. A U.S. study published by the Bureau

of Justice Statistics found that 63% of the prisoners studied were rearrested within three years of being released from prison [5]. A similar study in the United Kingdom found that 58% of prisoners were reconvicted within two years of being released from prison [24]. The United Kingdom followed up with another look at the same prisoners from the first study and found that 73% of them were reconvicted after seven years of their original conviction.

If students with criminal backgrounds revert to criminal behavior after acquiring IA skills, will they use these skills in the commission of computer-enabled crimes? Schools must consider students’ criminal background and the possible damages that they may cause to the school’s reputation and potential danger to school employees [22]. Graduates of IA programs who commit computer-enabled crimes may be hard to identify and prosecute. Newly graduated IA students may be as well versed in IA techniques as the people charged with investigating and solving computer-based crimes which will seriously complicate the crime investigations [1].

Another ethical dilemma surrounding student screening is whether it is ethical to educate and prepare students for a profession that they will not be able to practice because of their criminal background. As discussed earlier, many law enforcement agencies will not employ IA professionals with criminal backgrounds. Is it ethically acceptable for schools to collect tuition money from students that will not be able to find employment based on their education?

## III. RESEARCH METHODOLOGY

The goal of his research project was to collect data on schools that screen incoming IA students for criminal backgrounds. The study attempted to collect data on the state of the practice as well as how faculty members that teach in the IA discipline feel about the practice. Screening students raises many ethical issues that impact faculty satisfaction and the employability of graduates.

The data collection for this research project was done with an online survey. The survey instrument was kept as short as possible at 15 questions. A number of researchers have determined that longer surveys have lower response rates than shorter surveys [25]. Longer surveys may also receive lower quality responses [25]. The short survey instrument was reviewed by a panel of three faculty colleagues who checked the survey instrument’s readability and validity. The panel made a number of suggestions and comments that led to modifications of the survey instrument.

The instrument was developed with the Nsurvey tool. The survey was hosted online for one month. E-mails that

explained the research project, provided an assurance of confidentiality, and contained a link to the Web-enabled survey instrument were sent to 531 qualified faculty colleagues at schools that have been certified as Centers of Academic Excellence by the National Security Agency (NSA). The e-mail addresses of these faculty members were all collected from publicly accessible Web sites. The survey instrument asked the following questions:

- Question 1) Should students be admitted to an IA program if they have used a computer in the commission of a felony?
- Question 2) Should students be admitted to an IA program if they have used a computer in the commission of a misdemeanor?
- Question 3) Do you feel that someone with a criminal background is more likely to commit a crime in the future than someone without a criminal background?
- Question 4) Should students be admitted to an IA program if they have been convicted of stalking or harassment?
- Question 5) Should students be admitted to an IA program if they been convicted of obstructing justice or destroying evidence?
- Question 6) Should students be admitted to an IA program if they received a less than honorable discharge from the armed services?
- Question 7) Is it ethical to admit a student into a program that will prepare the student for a career that will be extremely difficult to obtain a job with a criminal record?
- Question 8) Should applicants with criminal backgrounds be hired as IA faculty members?
- Question 9) Does your school currently screen IA students for criminal backgrounds?
- Questions 10) If yes, who conducts the screening?  
 Local law enforcement  
 State law enforcement  
 Federal law enforcement  
 Private firm  
 Other
- Question 11) If yes, do you notify the potential students that a background check and obtain their consent prior to conducting the background check?
- Question 12) If yes, does your school have clearly defined criteria for evaluating criminal backgrounds and making a decision regarding admission?
- Question 13) Do you have any comments or opinions that you feel may be helpful to this research project?
- Question 14) How many years of college-level faculty experience do you have? \_\_\_\_\_
- Question 15) To assist in the analysis of the response data, would you please state which school you are primarily associated with? \_\_\_\_\_ .

#### IV. RESULTS

Invitations to participate in this research project were sent to 531 qualified faculty members. Not all of the invitations were delivered to a faculty member. A number (27) of the e-mails were not delivered because of incorrect e-mail addresses. Two of the targeted faculty members had left the Information Assurance discipline. Two auto responses were received from faculty members that were either on sabbatical or on extended military leave. Two invitations were declined by faculty members from one of the service academies who did not feel that their teaching environments qualified them to speak on this issue. The survey was taken by 75 faculty members giving a response rate of 14.12%. If the invitations sent to invalid e-mail addresses and the declined invitations are taken out of the calculation, the survey response rate increases to 14.94%. Survey responses were received from at least 20 different schools with Information Assurance programs that are NSA-certified Centers of Academic Excellence. The true total from CAEs cannot be determined as not every respondent provided the name of the school where they teach.

##### *A.State of the Practice*

The majority of the respondents do not work at schools that screen applicants for criminal backgrounds. Only two respondents acknowledged working at schools that would deny admission based on an applicant's criminal background. In addition to these schools, the military academies screen their candidates for admission to the academy, not just their IA program. More respondents did not know whether their school conducted background checks than answered no (32). Five of the respondents preferred not to answer the question.

While only two respondents said that their schools screen applicants with criminal backgrounds, 20 replied that their schools conduct background checks. Of the schools that conduct criminal background checks, the actual checks were done by a variety of internal, private, and law enforcement agencies. Table 1 summarizes the twenty answers on who conducted

Table 1: Who Conducts Criminal Background Checks

Investigating Body	Number of Responses
Local law enforcement	2
State law enforcement	1
Federal law enforcement	2
Private firm	3
Internal	2
Other	10

Total	20
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Only six schools obtained the student's consent before conducting a background investigation. One school did not obtain student consent while 26 respondents did not know their school's practice on obtaining permission and four respondents preferred not to answer this question.

Only three of the schools have clearly defined criteria for evaluating criminal backgrounds and making a decision regarding admission. Five of the schools do not have clearly defined criteria while 25 of the respondents did know if their school had criteria and four of the respondents preferred not to answer the question. The responses were not as evenly split when the survey asked if applicants with criminal backgrounds should be hired as IA faculty members. The majority of respondents (38) said that criminals should not be hired as IA faculty members while 18 said they should be hired, 18 didn't know, and 1 respondent preferred not to answer the question.

#### *B. Faculty Attitudes Toward Screening*

The faculty was asked if it is ethical to admit a student into an IA program if it is extremely unlikely that they will be able to find legitimate employment in that field. 27 felt that it was acceptable, 27 said that it was not ethically acceptable, 17 did not know, and five preferred not to answer. On this question, the respondents were evenly split and no conclusion can be drawn other than that there is no consensus on this question.

There was consensus on admitting students who had committed various criminal offenses. Table 2 provides a breakdown of the faculty responses on admitting students who had been convicted of felonies, misdemeanors, stalking, obstruction of justice, or received a dishonorable discharge from military service. Faculty clearly has opinions on admitting these students that their schools and program administrators should be aware of and taking into consideration.

Table 2: Faculty Attitudes

Should students be admitted to an IA program if they have been convicted of:	Yes	No	I Don't Know	Prefer not to answer	Total
Felony	18	45	11	1	75
Misdemeanor	44	16	13	2	75
Stalking	24	28	21	2	75
Obstruction of justice	25	32	17	1	75
Dishonorable discharge	38	16	18	4	76

## V. CONCLUSION

Information Assurance is a new and immature discipline. Screening students with criminal backgrounds from IA programs is currently done at a small number of schools. There are faculty members who feel that students with criminal backgrounds should be screened from admission. A large number of faculty members do not know what their school's screening practices are. This confused state of the practice will no doubt evolve with time, litigation, and legal precedents.

Schools need to decide if they want to be proactive and establish clear policies on whether or not they will screen students or react to individual admissions on a case-by-case basis. The time to establish an admission policy is before the student shows up in the office with a checkbook in hand. Concerned faculty need to raise the issue with their administration and have a sound, responsible policy in place before they deny admission to potential students. The costs and benefits need to be weighed for each academic environment.

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