Fundamentals of Computer Law

Matthew N. O. Sadiku

Department of Electrical & Computer Engineering, Prairie View A&M University,
Prairie View, TX USA

Uwakwe C. Chukwu

Department of Engineering Technology, South Carolina State University, Orangeburg, SC, USA

Janet O. Sadiku

Juliana King University, Houston, TX, USA

Abstract: Computers have changed the world in unprecedented ways. They make it easier to do lawful things, and they make it easier to break the law. Computer law is the body of law that deals with electronic data. It touches over several broad areas, ranging from security, privacy, tort law, and even the US Constitution. Different laws touch on electronic media at both the state and national levels. Since computer technology keeps changing and evolving, computer attorneys are at the forefront of a rapidly changing world. This paper provides a brief introduction to computer law.

Keywords: Computer Law, Internet law.

INTRODUCTION

New technologies are constantly creating new frontiers for policymakers, who are attempting to understand and balance the costs and benefits to society. Transformational technologies like artificial intelligence, cloud computing, and Internet of things profoundly impact the legal landscape. They are changing law practice and how law governs technology.

Today, computers are more prevalent than ever before. Computers have been regarded as the most significant invention after the wheel. They have revolutionized the way we conduct business, socialize, and carry out transactions with the corporate and government sectors. Computer technology is always growing and evolving, leading to ever-changing laws and regulations

Computer law encompasses all of the laws that relate to the transfer, use, and storage of electronic information. In essence, it is any law that has to do with computer hardware and software and other electronic devices that store information. It includes a wide range of areas such as security, privacy, intellectual property rights, cyber law, and constitutional law.

Computer lawyers have the privilege of determining the regulations that touch on computers and the Internet. They formulate, enforce, and protect laws that govern computers and electronic data. Their work also involves representing individuals, companies, and governments as well as lobbying and coming up with ways to implement policies. A computer lawyer deals with

everything from contracts to privacy protection, among many others. Different laws touch on electronic media at both the state and national levels.

COMPUTER LAW

Computer law refers to a number of legal areas affecting the design and use of computer hardware and software, and the transmission of data via physical media. It encompasses the full range of technology law, including cybercrime and cybersecurity, biotech, intellectual property, privacy law, consumer privacy, cybercrime, entertainment law, telecommunications law, constitution law, and business law.

For attorneys who love tech and enjoy technical information might enjoy practicing computer law. Their work might involve lobbying and developing ways to implement policy. A career in computer law requires that you keep abreast of the latest technological changes as well as related legislations. It also requires strong analytical and critical thinking skills. The salary for accomplished, seasoned computer lawyer is lucrative. Experience plays a crucial role in determining the salary of a computer attorney. There is a high demand for computer lawyers in companies at both the government and corporate levels. Figure 1 shows a computer lawyer at work [1]. Just like other fields in law, some skills give you an edge over other lawyers. These include [2]:

➢ Great oral skills

➢ Analytical and rational thinking

➢ Excellent writing skill

➢ Technological proficiency and know-how

➢ Knowledge of computer laws and legislature

➢ Teamwork

➢ Legal research

APPLICATIONS

There are a lot of avenues for practicing computer law. Every transaction that involves a computer has something to do with a contract, intellectual property rights, privacy laws, tort, government regulations, and legislation, etc. Computer law is applicable to the following areas [2-4]:

➢ *Contracts:* Contracts are an essential part of any computer transaction. No transaction takes place without a valid contract that is drawn up by a competent computer lawyer. It is the duty of a computer lawyer to ensure that all the legal requirements are met and observed by both parties in the contract or agreement. Companies in the computing business use contracts in their everyday operations. A computer lawyer wrote that agreement. Computer lawyers must know all of the laws that relate to contracts and computers.

➢ *Privacy*: Information privacy is one of the most sensitive areas for any company. This includes protecting confidential information during transactions, like credit card numbers. Privacy laws can be applied to electronic communications issues and protect intellectual property online. Breaching privacy laws is a serious matter and a company should not take it lightly. A company must protect the personal information that their clients share with them. Computer lawyers help determine when such personal data may be shared and help their clients avoid being sued or avoid expensive privacy settlements. They contemplate and address how to keep private information safe in a world where the information is available at the click of a button. Figure 2 shows cybersecurity and privacy law [5].

➢ *Intellectual Property:* Any discussion on computers is not complete without mentioning intellectual property (IP) rights. The design of computer hardware and software are typically

protected by patents, while the logos of various products are protected by trademark. Some other information may be protected by copyrights, as shown in Figure 3 [6]. Companies make products that are protected by intellectual property rights. They sell a lot of hardware and software products daily. They need the input of computer lawyers to ensure they comply with intellectual property rights and that their IP rights are protected. Nobody wants to be caught infringing on the IP rights of another company. The financial damages are often high. Computer lawyers also spend a lot of their time filing for patents, trademarks, and copyrights. They need to help the company preserve their work so that they can be the ones who profit from it.

➢ *Cybercrimes:* Cybercrime is a new area that involves computers usage, typically illustrated in Figure 4 [7]. It may refer to all crimes involving computer usage.

Types of cybercrime may include hacking, data theft, swatting, doxing, cyberstalking, cyber harassment, unlawful access to electronic communications, or fraud. People easily use computers and Internet to commit crimes, which may target individuals, organizations, or governments. Online, it is easy to violate someone else's copyright to make a quick buck. Every day, malicious people all over the world use computers to steal money and personal information from individuals, organizations, or governments. Criminals use computers to facilitate crime from the comfort of their home. It has been easy for unscrupulous companies and individuals to use the anonymity of the Internet world to violate the copyright law. Computer lawyers have to be several steps ahead when dealing with computer crimes. They help formulate laws and regulations that help identify and mitigate computer crimes. They also defend people who are charged with committing computer crimes. One area of great interest in recent years is anti-hacking laws. These laws are designed to punish individuals who attempt to break into the computers and networks of others.

➢ *Telecommunications Law:* This is usually regulated by governments. Every local, state, national, and international government has a set of rules and regulations that governs its telecommunications industry. The laws and regulations often govern how companies use bandwidth, manufacture telecommunication equipment, privacy, market share, etc. Computer lawyers ensure that telecommunication companies keep all the rules in check and adhere to the regulations. Computer lawyers also help when there is a litigation against the company for breach of any telecommunication law or regulation. There are tons of lawsuits that involve telecommunication companies and these require seasoned computer attorneys.

BENEFITS AND CHALLENGES

Computer law is a diverse and rapidly changing field. In today's interconnected world, technology law issues are global and international in scope. Pursuing a career in computer law is both rewarding and challenging. Computer law is one of the best-paying jobs. There are lots of privacy and IP rights cases going on that there are not enough attorneys around to meet the demand. Although a legal career in computers is fraught with challenges, attorneys who love everything about technology will find themselves at home with computer law. Computer attorneys have the unique privilege of influencing laws and being at the forefront of implementing them or defending clients. A typical salary of a computer lawyer is about $114,000.

CONCLUSION

Computer law is an ever evolving field of the law and will continue to evolve along with computer technology. Statistics indicate that there is a growing need for all types of lawyers and that seasoned computer lawyers are in high demand. If you want to shine and excel in the competitive field of law, computer law is a great place to be. To become a computer attorney requires that you complete an undergraduate degree program, get a law degree, and pass your bar exam so that you get a license to practice. The highest degree you can get in law is a Juris Doctor degree, which is usually the last step in becoming an accomplished and respected lawyer. A

computer lawyer can enter either private practice or get employment with organizations, institutions, and even governments to provide legal services. More information about computer law can be found in the books in [8-20] and the following related journals:

➢ *International Journal of Technology Law and Practice*

➢ *Computer Law and Security Review*

➢ *Computer Law Review International*

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ABOUT THE AUTHORS

Matthew N.O. Sadiku is a professor emeritus in the Department of Electrical and Computer Engineering at Prairie View A&M University, Prairie View, Texas. He is the author of several books and papers. His areas of research interest include computational electromagnetics, computer networks, and marriage counseling. He is a life fellow of IEEE.

Uwakwe C. Chukwu is an associate professor in the Department of Industrial & Electrical Engineering Technology of South Carolina State University. He has published several books and papers. His research interests are power systems, smart grid, V2G, energy scavenging, renewable energies, and microgrids.

Janet O. Sadiku holds bachelor degree in Nursing Science in 1980 at the University of Ife, now known as Obafemi Awolowo University, Nigeria and Master's degree from Juliana King University, Houston, TX in December 2022. She has worked as a nurse, educator, and church minister in Nigeria, United Kingdom, Canada, and United States. She is a co-author of some papers and books.
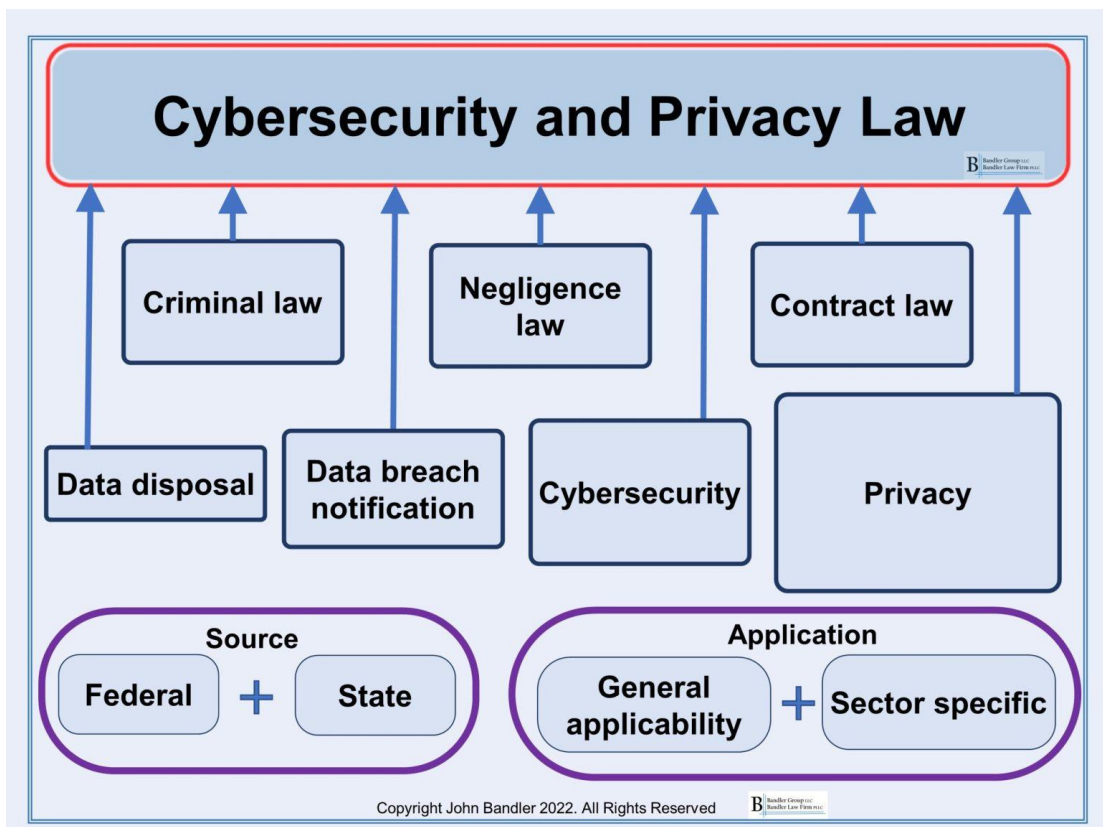
Figure 1 A computer lawyer at work [1].

Figure 2 Cybersecurity and privacy law [5].

Figure 3 Information protected by copyrights [6].

Figure 4 Cybercrime [7].