September 3, 2020

Chief Judge Janet DiFiore  
New York State Court of Appeals  
20 Eagle Street  
Albany, NY 12207

The Honorable Brad Hoylman  
Chair, Committee on Judiciary, New York State Senate  
Legislative Office Building, Room 310  
Albany, NY 12247

The Honorable Jo Anne Simon  
Assembly Member, New York State Assembly  
Legislative Office Building, Room 435  
Albany, NY 12248

The Honorable Carmen Beauchamp Ciparick  
Chair, New York Board of Law Examiners  
Corporate Plaza Building 3  
254 Washington Avenue Extension  
Albany, NY 12203

Scott M. Karson, Esq.  
President, New York State Bar Association  
1 Elk Street  
Albany, NY 12207

**Re: Support for Emergency Diploma Privileges to Practice Law in New York**

Dear Chief Judge DiFiore, Chairman Hoylman, Assembly Member Simon, Judge Ciparick, and Mr. Karson:

My name is Albert Fox Cahn, and I serve as the Executive Director of the Surveillance Technology Oversight Project (“S.T.O.P.”), a New York-based privacy and civil rights group. I write to urge you to provide temporary diploma privileges for any person who is otherwise qualified for
admission to the New York bar, in lieu of the remote bar examination currently scheduled for this coming October 5th and 6th.

The New York Board of Law Examiners (“BOLE”) plans to use ExamSoft’s products for the remote bar exam, including Examplify, ExamID, and ExamMonitor. ExamID is an identify verification product that uses facial recognition scan at the start of each of the four sessions of the bar exam. Even more invasive, ExamMonitor records examinees through their computer’s camera and microphone, purporting to use artificial intelligence to detect “suspicious behavior.” These forms of biometrics-driven artificial intelligence have historically proven to be biased and error prone, and ExamSoft provides examinees little reason to believe these products will fare better in October.

I. Facial recognition and artificial intelligence are dangerous and discriminatory.

Facial recognition is biased, error prone, and antithetical to the values of the Bar. A recent federal study found that the majority of facial recognition systems are less accurate for women and people of color. Error rates were highest for Black, Asian, and Native American individuals, and some systems misidentified female-presenting individuals five times more often. MIT and Stanford researchers previously documented similar limitations, finding that facial recognition systems fail as much as 30 times more often for women of color than for white men. Since bias factors are cumulative, an individual can face astronomical error rates.

In some cases, employers have found that facial recognition simply would not recognize Black and transgender applicants. The same software has also been used by law enforcement

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3 Id.
4 Id. at 7.
agencies to target undocumented communities, communities of color, and political protesters. Just last month, the New York City Police Department reportedly used facial recognition to target a prominent Black Lives Matter activist.

These problems are exactly why the New York State Assembly and Senate banned facial recognition in our public schools, acknowledging that the technology is completely inconsistent with effective education. But if this invasive and error-prone technology is unfit for our classrooms, how could it possibly be appropriate for examinees’ bedrooms, or wherever else they can find privacy to take this exam?

Facial recognition is not unique—every form of artificial intelligence is undermined by biases. Artificial intelligence systems are shaped by countless human decisions, replicating and frequently augmenting the biases of the programmers who design the model and select its training data. Even where developers seek to eliminate bias, artificial intelligence can still discriminate where algorithms improperly rely on proxies for protected characteristics.

ExamSoft has released minimal information on its facial recognition and other artificial intelligence models, not even its accuracy and error rates. Examinees and members of the public have no way to evaluate the reliability of such a testing scheme or how it reflects on test-takers’ fitness to practice law. And since ExamSoft first finished beta testing its monitoring software only a few months ago—and with only eight customers, at that—it is unlikely that the company has sufficient data to conduct a comprehensive quality assurance review.

Even if BOLE conducts human review of all footage flagged by ExamSoft’s artificial intelligence for “unusual behaviors, movements, or sounds,” this review is unlikely to mitigate automated bias. Moreover, reviewing footage of examinees’ homes will be deeply invasive, prying

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11 See id.
13 NY Bar FAQs, supra note 1, at 5.
into their most intimate spheres of life. The risks are far from theoretical. For example, proctors for The American Board of Surgery’s General Surgery Qualifying Exam reportedly contacted examinees after the exam on social media.\(^{15}\)

Additionally, ExamSoft’s privacy policy states that it may share data with law enforcement,\(^{16}\) transforming the bar exam into a warrantless wiretap of examinees’ residences. It is disturbing and deeply ironic that a cohort of lawyers will be tested on the protections against government searches at the same moment they are forced to use software that eviscerates those rights. Despite BOLE’s assurance that it “will destroy and/or direct ExamSoft to destroy” collected data “within a reasonable time,”\(^{17}\) ExamSoft itself acknowledges in its privacy policy that doing so may not always be possible.\(^{18}\)

II. ExamSoft’s remote proctoring software will expose examinees to identity theft.

ExamSoft collects troves of personal information, putting examinees at risk of identity theft, ransomware attacks, and other crimes.\(^{19}\) For example, ExamSoft records and timestamps every keystroke, records examinees through their computers’ cameras and microphones, and disables all programs on examinees’ computers.\(^{20}\) These features require unfettered access to critical parts of a computer’s operating system.\(^{21}\) Many examinees must disable antivirus software just to install and run ExamSoft’s software,\(^{22}\) exposing their devices and the data contained therein.\(^{23}\)

Keylogging component is particularly alarming since, when combined with the need to disable antivirus software, it opens the door for malicious actors to covertly access passwords,

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\(^{15}\) See American Board of Surgery (@AmBdSurg), Twitter (July 16, 2020, 8:31 PM), https://twitter.com/AmBdSurg/status/1283922325910491137.


\(^{17}\) NY Bar FAQs, supra note 1, at 5.

\(^{18}\) Privacy Policy, supra note 16 (“When ExamSoft has no ongoing legitimate business need to process personal data, we will either delete or anonymize/de-identify it or, if this is not possible (for example, because the data has been stored in backup archives), then ExamSoft will securely store the personal data and isolate it from any further processing until deletion is possible.”).


\(^{21}\) Press Release, supra note 19, at 8.


\(^{23}\) Press Release, supra note 19, at 8.
security credentials, and other personal information, such as stored photos and videos. Again, these risks are far from theoretical. When Florida attempted to use remote proctoring software for its bar exam just month, examinees reported suspicious login attempts to their email accounts, bank accounts, and messaging applications. Florida may have used a different software vendor, but ExamSoft’s software may be equally susceptible to the exact same attack.

These dangers may outlast the bar exam, with users frequently encountering difficulties fully uninstalling software that requires the level of system access needed for ExamSoft’s products. The risk to examinees is vastly increased if any of ExamSoft’s components remain on a computer after the uninstallation process.

There is also the ever-present concern over a possible data breach of information stored by ExamSoft. At a minimum, ExamSoft will have copies of examinees’ government identification, photos, audio recordings, and video recordings. Even if ExamSoft destroys this data “within a reasonable time,” as BOLE claims, the risk is present for as long as this data is held.

These dangers are party of why software vendors like ExamSoft must conduct routine security audits, either internally or (preferably) by a third party. But ExamSoft provides no public information about any internal security audits, let alone independent audits like those required for information security certifications from the International Organization for Standardization or the American Institute of Certified Public Accountants. ExamSoft’s sole data protection documentation comes from its privacy policy, which addresses the topic, in its entirety, by stating:

ExamSoft takes reasonable precautions to protect your personal data from loss, misuse and unauthorized access, disclosure, alteration, and destruction. No method of transmission over the Internet, or method of electronic storage is 100% secure, however. Therefore, ExamSoft cannot guarantee its absolute security.

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24 Id.
26 Id.
27 Press Release, supra note 19, at 8.
28 See NY Bar FAQs, supra note 1, at 3 (“At the beginning of the first mock exam for Examplify, applicants will be required to display to the web camera the same photo ID that is uploaded to BOLE. The photo must be a valid U.S. driver’s license, U.S. non-driver ID or passport.”).
29 Id. at 5.
32 Privacy Policy, supra note 16.
III. Conclusion

COVID-19 presents unprecedented challenges and requires innovative solutions. But innovation must be equitable, just, and consistent with the values of our profession. A bar exam that forces our future colleagues to use invasive and unproven technology, relinquish their fundamental rights, endangers their finances and privacy, and potentially endure discrimination is antithetical to everything the law is meant to uphold. But keeping recent graduates in financially precarious positions until 2021 is also no answer. As a result, the only solution is to grant diploma privileges to those applicants who have satisfied all other criteria for admission. If we fail to rise to this moment, we will not only betray thousands of recent graduates in a time of unparalleled crisis—we will betray our duties as officers of the court.

Sincerely,

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Albert Fox Cahn, Esq.
Executive Director