The Situation: Artificial intelligence ("AI") technology is exploding across virtually all industries. Technology companies are innovating at warp speed, and even companies that do not principally identify as "technology companies" are becoming increasingly "high tech" in how they deliver goods and services. Innovation is outpacing the law—many aspects of AI legal protection are still open questions.

The Result: With innovation comes imitation … and infringement and misappropriation. Companies must be vigilant in protecting and enforcing their intellectual property ("IP") rights in AI.

Looking Ahead: The time is now to devise a legal strategy to protect IP in AI. Such strategy should consider not only patent protection but also copyrights and trade secrets.

“Artificial Intelligence” has been the subject of countless science fiction books and movies. Just a few months ago, Blade Runner 2049 hit the theaters as a sequel to the original 1982 Blade Runner film, which imagined a futuristic world—in the year 2019—where synthetic, bioengineered humans run rampant. While Blade Runner’s dystopian vision has thankfully not come to pass, AI has begun to infiltrate virtually all business sectors and nearly every aspect of the consumer experience.

The legal implications for AI are complex and constantly evolving. It is important for businesses today to implement a proactive and comprehensive strategy to protect their IP rights in AI. Such strategy should consider not only patent coverage, but also copyright and trade secret protection, particularly for aspects of the IP that may not (rightly or wrongly) be patent eligible.

AI and Trade Secrets

Trade Secret Protection
Trade secret laws protect economically valuable secrets. Protectable information includes formulae, compilations, programs, methods, techniques, processes, designs, and codes. Trade secret protection arises automatically provided that the trade secret owner can demonstrate that the information creates a competitive advantage by virtue of its secrecy and that reasonable measures have been taken to maintain its secrecy. Many AI system elements are well-suited for trade secret protection, such as: neural networks, including modular network structure and individual modules; training sets, data output, and other data; software including underlying AI code and AI-generated code; and learning, backpropagation, and other algorithms.

"Reasonable measures" to maintain the secrecy may vary depending on a company’s size and resources but can include physical and technical solutions to limit and monitor access to trade secret information. Written policies should dictate trade secret management, and employees should be contractually required to protect company confidential and trade secret information from improper disclosure. When sharing trade secrets with business partners, nondisclosure agreements should control. Object code given to customers should include digital rights management and robust licensing terms.

Developing a Strategy
Companies should consider a trade secret program that goes beyond "reasonable measures." More robust measures will diminish the likelihood of misappropriation and enable rapid detection of misappropriation when it occurs. If a particular AI trade secret is vital to the company—for example, a large training dataset—then significant resources and care should be devoted to its protection.

AI and Copyright

It is important for businesses today to implement a proactive and comprehensive strategy to protect their IP rights in AI. Such strategy should consider not only patent coverage, but also copyright and trade secret protection, particularly for aspects of the IP that may not (rightly or wrongly) be patent eligible.
Software Copyright Protection
Though we may not think of software as a literary work, it is protected as such under U.S. copyright law. Copyright protection in software extends to all of the original expression embodied in the software, but not to its functional aspects. The functionality of AI software is often precisely what makes it valuable, so litigants must exercise care to connect that functionality (which is not covered by copyright) to the specific original expression in the software (which is).

Issues that arise in copyright protection of AI include:

Authorship. Following the infamous "Monkey-Selfie" case, the U.S. Copyright Office clarified that "[t]o qualify as a work of ‘authorship’ a work must be created by a human being." This creates challenges for the copyrightability of AI-generated works.

There are also hurdles to clear with human-generated software. The work for hire doctrine does not extend to commissioned works of computer software. Accordingly, agreements with third-party software developers must include express assignment language. In addition, there are challenges relating to third-party and open-source code that must be evaluated during software development.

Copyright Registration. Although not required to secure a copyright, registration confers important benefits. Note that revised software may contain new copyrighted material requiring a new registration.

Redaction of Trade Secrets in Copyrightable Code. Where copyrighted software includes trade secrets, they should be redacted from the code deposited with the Copyright Office, as the deposit is a public record.

Developing a Strategy for Protecting Copyrighted AI Software. Organizations should develop a strategy for timely registering software. "Version control" is critical because, in litigation, the full code for the "copyrighted work" will likely need to be produced and will need to match the version that is registered and the version that the defendant copied. Further, robust licenses, including end-user license agreements, should control use of the licensed software and allocation of ownership of code and/or data developed from the licensed software.

Conclusion
AI today is less about imagined scenarios in the far-distant future and more about real-world applications happening right now or on the horizon. Organizations having a robust and well-thought-out AI protection strategy in place will be best positioned to enforce their IP rights when infringement and misappropriation occur and, better yet, to prevent unlawful conduct before it occurs. Trade secrets and copyright provide unique protection for IP that cannot be achieved by patents alone.