

DS 760

# Limits of Intellectual Property

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Rick W. Lentz, M.S., M.S.

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## Questions and Answers

Q: Given that algorithms are not patentable, many private companies keep their algorithms from the public by making them trade secrets. What are trade secrets, legally speaking?

A1: Trade secrets consist of information and can include a formula, pattern, compilation, program, device, method, technique or process. To meet the most common definition of a trade secret, it must be used in business, and give an opportunity to obtain an economic advantage over competitors who do not know or use it.

A2: In the context of data science, there are many examples of kinds of algorithms that are not made public to protect the interests of a company. Most companies offer these as 'cloud' services, to protect their algorithms. E.g., Google has marketed many products only through online-only offerings.

A3: Some universities protect their intellectual property and have strict security requirements as part of sponsor partnering agreements. For example, UW Madison deployed its government cloud solution on campus (they specifically asked Google to deploy a mini datacenter on campus) to protect the IP development process from adversarial exploitation.

Q: Can you think of cases where such secrecy could be problematic?

A4: Sure. Kaspersky Lab's enterprise APT protection was deployed throughout data centers serving cloud services and across enterprises, including on computers where developers were working on algorithms. Despite this privileged, inner ring access, security managers discounted repeated risk warnings from federal government officials. It is only after the fact that many companies are finding out the true magnitude of their intellectual property breach.