

TECH 780/880
Take-Home Quiz 1: Trade Secrets
Spring 2019

This take-home is due on **Tuesday, February 26, 2018 at 6:00 pm**. Please email your responses to roger.ford@law.unh.edu by that time.

Please format your responses similarly to this document: **single-spaced, with 1.5-inch margins, and extra space between paragraphs**. Use 12-point Cambria, Century, Constantia, Book Antiqua, or another high-quality serif body font; do not use Times New Roman, which is a terrible font. (Or if you want to use LaTeX and Computer Modern, that's fine with me.) Number your pages and submit your answers as an attached PDF file with the file name "[your last name here] quiz 1.pdf."

You may consult **any existing material you wish** while working on this quiz. You may not, however, discuss it with anyone else—classmate, friend, random lawyer on the internet, anyone—until after everyone has completed it. Do not spend more than **two hours** on this—it shouldn't take anywhere near that long. Do not write more than 1000 words total across all three answers. No need to include a copy of the questions with your answers. List your word count at the end of the document.

Please type (do not copy and paste!) the following at the top of your exam:
I affirm that I have not discussed this quiz with anyone during its administration and that I have complied with the word and time limits. (You can omit these words from your word count.)

If any of the facts or questions is unclear, make reasonable assumptions and inferences, state them explicitly, and explain how your answer depends on them.

Good luck!

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Predictim is a service that promises to evaluate babysitters' trustworthiness by analyzing their social-media posts. The service was the subject of a recent front-page story in the *Washington Post*:

When Jessie Battaglia started looking for a new babysitter for her 1-year-old son, she wanted more information than she could get from a criminal-background check, parent comments and a face-to-face interview.

So she turned to Predictim, an online service that uses "advanced artificial intelligence" to assess a babysitter's personality, and aimed its scanners at one candidate's thousands of Facebook, Twitter and Instagram posts.

The system offered an automated "risk rating" of the 24-year-old woman, saying she was at a "very low risk" of being a drug abuser. But it gave a slightly higher risk assessment—a 2 out of 5—for bullying, harassment, being "disrespectful" and having a "bad attitude."

The system didn't explain why it had made that decision. But Battaglia, who had believed the sitter was trustworthy, suddenly felt pangs of doubt. "Social media shows a person's character," said Battaglia, 29, who lives outside Los Angeles. "So why did she come in at a 2 and not a 1?"

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A Predictim scan starts at \$24.99 and requires a babysitter's name and email address and her consent to share broad access to her social media accounts. The babysitter can decline, but a parent is notified of her refusal, and in an email the babysitter is told "the interested parent will not be able to hire you until you complete this request."

Predictim's executives say they use language-processing algorithms and an image-recognition software known as "computer vision" to assess babysitters' Facebook, Twitter and Instagram posts for clues about their offline life. The parent is provided the report exclusively and does not have to tell the sitter the results.

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After the *Post* story came out, Facebook, Twitter, and Instagram cut off Predictim's access to data on their platforms. (Everything before this point is true. Everything after this point has been made up for this quiz.)

Predictim spent two years developing its risk-assessment algorithms, with three engineers working full-time on the problem. To do so, it gathered information from about 50,000 Facebook accounts, which it gained access to by advertising a free personality quiz. When a user filled out the quiz on Facebook, they agreed to give the quiz's poster (i.e., Predictim) access to certain account information. The company used that information and their answers to the quiz questions to build their algorithms. The engineers were careful not to tell anyone what they were up to because they thought Facebook might shut down the quiz if they knew what it was being used for.

The company stored the information it obtained from quiz takers on a server run by Amazon Web Services. The server was not password protected and so was accessible to members of the public, but only if they happened to guess the right address, which had a lengthy pseudorandom string of characters in it that was intended to provide security through obscurity. (Think something like data-dac9630aec642a428cd73f4be0a03569.predictim.aws.) Development of the algorithms was done on the three engineers' personal laptops and on a different AWS server with a similar domain name. The engineers worked in coffee shops but were careful to always use a VPN service so their network traffic could not be seen by others nearby, and to communicate in text chat instead of out loud so that no one would overhear what they were doing.

After the *Post* story, two of the engineers left to go to work for ZipRecruiter, a company that posts job ads and helps companies find the right employees. They're recruited to work on ZipRecruiter's new artificial-intelligence team, which works on matching candidates to employers based on their résumés, LinkedIn profiles, and other publicly accessible information.

Question 1. Give the best argument that the Predictim algorithms are trade secrets and the best argument that they are not. Which side is more persuasive?

Question 2. I haven't told you every fact that would weigh in on the question of whether the algorithms are trade secrets. If you were a lawyer representing the departed employees who wanted to prove that they are not valid trade secrets, what facts would you try to find and prove to help your case?

Question 3. If Predictim sues the two departed employees to prevent them from going to work for ZipRecruiter under an inevitable-disclosure theory, who should win? Why? (Assume that *PepsiCo* is good law in their jurisdiction.)

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