

# BIG DATA BRINGS THE IMPOSSIBLE WITHIN REACH



Lacey Keller (BBA '08) is a Managing Director with Gryphon Strategies, an international investigations firm in New York. She has almost a decade of research and analytics experience and currently advises financial and law firms on how to best use data for investments and investigations.

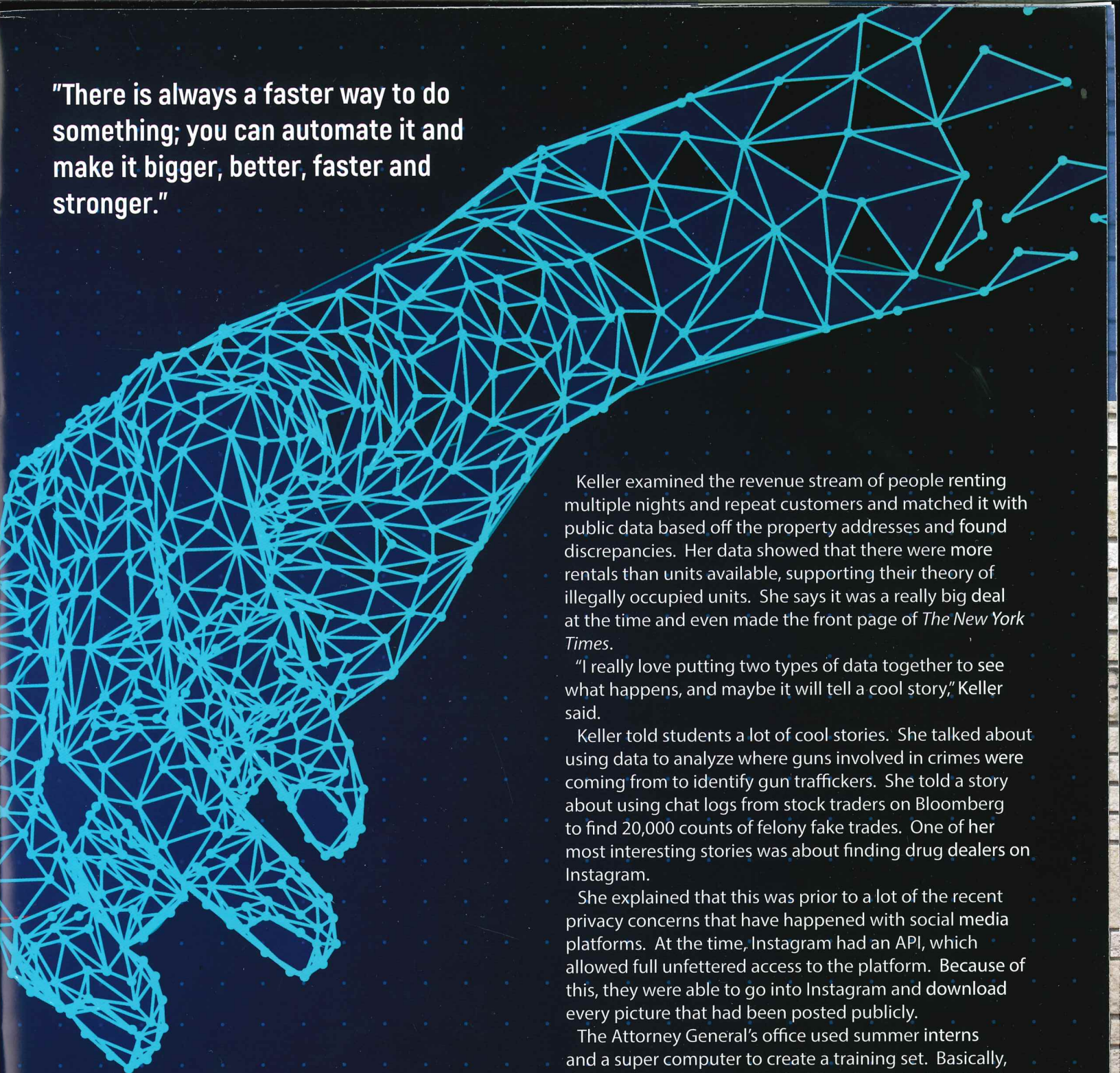
She visited campus last September to speak at Wake Up with Washburn and also talked to students about her experiences in New York City working with labor unions, the Office of the New York State Attorney General and in the private sector.

Keller's first assignment for the labor unions was to research and find the square footage of 2,000 buildings using public data. They needed the information to measure workforces and the number of workers they could organize. Her boss expected the assignment to take her all summer to compile the information by hand, but Keller figured there had to be a better way to do it.

Instead, she built a macro that downloaded and compiled the data quickly for each building, and she handed over the information to her boss within the week.

"That first assignment was a turning point for me. I realized there is always a faster way to do something; you can automate it and make it bigger, better, faster and

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stronger," Keller said.

After her time working with the labor unions, Keller went to work for the New York State Attorney General's office. Her role there was to help provide information for ongoing cases within their large jurisdiction. She worked on cases having to do with money laundering, human trafficking, gun trafficking, public corruption and fraudulent charities.

One of her first cases was against Airbnb, when the company was very new. The Attorney General's office had the suspicion that more apartments were being rented than there should be and that full apartment buildings were being used as hotels. They brought a case against Airbnb, but needed to show the scale of the crimes committed.

Keller examined the revenue stream of people renting multiple nights and repeat customers and matched it with public data based off the property addresses and found discrepancies. Her data showed that there were more rentals than units available, supporting their theory of illegally occupied units. She says it was a really big deal at the time and even made the front page of *The New York Times*.

"I really love putting two types of data together to see what happens, and maybe it will tell a cool story," Keller said.

Keller told students a lot of cool stories. She talked about using data to analyze where guns involved in crimes were coming from to identify gun traffickers. She told a story about using chat logs from stock traders on Bloomberg to find 20,000 counts of felony fake trades. One of her most interesting stories was about finding drug dealers on Instagram.

She explained that this was prior to a lot of the recent privacy concerns that have happened with social media platforms. At the time, Instagram had an API, which allowed full unfettered access to the platform. Because of this, they were able to go into Instagram and download every picture that had been posted publicly.

The Attorney General's office used summer interns and a super computer to create a training set. Basically, the interns went through all of the photos to identify if the image contained drugs or not, which systematically showed them which accounts and users were the alleged drug dealers. Keller theorized that the investigation would ultimately use pattern analysis, as the dealers were using the same photos, but posting them on different accounts. They would then obtain the account owners' information from Instagram to prosecute the offenders.

The public sector was a good gig for Keller, but she found she was in need of bigger challenges. She took her position with Gryphon Strategies in 2017. She said her role there is much different; it includes a lot more marketing and sales. She emphasized the importance of self-marketing in any position, but especially when working in the private sector.