Patents: Using cutting-edge AI and data analytics, Jinan Glasgow George is pioneering a new era of innovation.

When her parents gave Jinan Glasgow George her first name -- a combination of her dad's, Jin, and mom's, Nancy -- it was a creative start to a career of pioneering innovation.

Today, she heads NEO IP ("intellectual property"), a law firm specializing in patents that combines the insights of George's own career as an inventor with cutting-edge artificial intelligence and data analytics.

"We're not just reactive like most attorneys who just file patents. We proactively get to know the inventor to understand her or his purpose in creating something and the long-term goals," George says. "A patent isn't a winning lottery ticket that automatically pays off. You need to know how to monetize it and we use data to drive decisions about the best way to do this. Because of my background, I know how the patent office will look at an application and I bring my experience in engineering and the law to make success far more likely than simply writing it up."

George earned a degree in textile engineering from North Carolina State, which included researching 3-D composite materials for NASA's space shuttle as part of the mission to Mars. "Carbon fiber composites are now part of everything from golf shafts to race cars," she says.

George minored in French and her first job was with a French company that had subsidiaries in the paper industry, where she worked on the massive transport system that runs around the clock 365 days a year, carrying wet slurry at super high speeds until it is pressed dry. She was the liaison with outside patent attorneys.

"That was the fork in the road that made me

decide to go to law school to study patent law," she says. She took off much of 1996 to work with a biomedical startup and work as an examiner in the US. Patent Office. She also earned a Master's degree at Duke University.

While studying law at the NC State, she interned with a large New York City law firm, where she went through the entire process of taking depositions to the trial. "I learned that I was not really interested in litigation, but I filed my own first patent while there and wanted to start my own firm to help inventors."

She formed her practice and spun out NEO Patents, a software company to help entrepreneurs visualize data and analysis. She sold both and did consulting for them with clients including Apple, Microsoft and Visa.

In 2006, she launched NEO IP "to provide a holistic approach to help inventors strategize the management of their intellectual assets, rather than simply being transactional." She also formed MagicNumberIP.com, a sub-

scription data analytics service that helps companies know about all the existing solutions to problems.

"We've made this free for anyone working on COVID-19-related products and assisted patents for everything from better ventilators to faster facial recognition, when you can't wait for something sent into the cloud to respond," she says. "More data stimulates more creativity."

Patents offer 20 years of exclusive rights from the time the patent is filed in exchange for publication of the details about how the products works. It typically takes a few years to get one approved and from that point a renewal has to be paid for every six-and-a-half years until expiration. The trade-off for the rights is that other companies have the information to able to develop their own products, benefiting the public.

"This system is why our country has had the healthiest economy in history," she says.

In her winding road to an innovative and integrative understanding of patents, George has developed strong opinions about "IP sins":

Failing to patent software: "It wasn't until the mid-90s that software was patent-eligible and some still think this is still true, while many have the attitude that nobody should own software, that it should be open-source, which they think means free and unregulated. None of this is true and open-source software is managed to require compliance with copyrights and agreements around IP." A Supreme Court ruling in 2014 added to the impression that software can't be patented, but it really just confirmed the standard that you can't patent a simple automation of a manual process. "Most software today is patentable and companies often pay big bucks to acquire others mostly for those patents."

Not filing before you make an invention public: "When you start using an invention publicly and explain how to use it, what do you have left to trade to the government in exchange for two decades of protection?"
Filing patents on "everything": Don't turn every idea into a patent, like the constant disclosures many universities make, which are never turned into licensing revenue sources.

Filing DIY patents: "You get what you pay for -- if you have something valuable, hire a pro or you might find out that the online patent application you filled out doesn't provide the protection you thought you were getting."

Assuming you own everything: "It's the actual claims of your patent that determine the legal value, not your story of the invention, the description, or a drawing you include." Formal claims need to be worded in a certain way, which is where lawyering comes in, to be sure you can assert them in court, if needed.

Playing the lottery: Thinking that money will start rolling in because you have a patent. "You have to monetize and enforce it, so its value depends on who cares about it and what other patents are similar."

Believing you are too small to need protection:"Patents are especially valuable when your startup needs to raise money and get contracts, since they show why your business model is unique. They can help you hire people who have top skills and attract valuable board members or advisors. There are funds today that will spend a fortune to help you enforce high-quality patents if you case is good." — By Scott Smith, California Business Journal.