

# Legally Bound

*STEM skills and diversity are increasingly important to the practice of law*

BY ADRIENNE MAND LEWIN

**M**adhumita Datta has a Ph.D. in electrical and computer engineering from the University of Maryland, College Park, where she also did post-doc research and published numerous papers. She has experience with everything from electrochromic devices to biosensors, nanoelectronic circuits and thin film batteries. As a graduate student, she patented optoelectronic



Madhumita Datta

device integration and packaging technology, which was later transferred to the NSA's Microelectronics Research Laboratory. With a research grant from the National Science Foundation, she developed optoelectronic devices for wavelength tuning when she was a post-doctoral researcher and was preparing to become a professor.

Yet today, Datta is an intellectual property lawyer practicing at a prestigious

national firm. "I think in some ways I was more suited than some other people to transition into a law career, to analyze and write a lot rather than conduct hands-on research and development, and I'm becoming more and more comfortable in that role," she says. "At first, I used to think, 'Others are inventing, and I'm just writing about it.' Gradually, I started to appreciate that I'm giving voice to their invention, protecting their legal rights and bringing their inventions closer to market. I no longer miss being an engineer for sure."

Datta's experience is just one of the many

ways that people with STEM backgrounds are transitioning to careers in the law, while law schools recruit them and law firms increasingly seek their expertise in technology practices and their understanding of clients' needs. At the same time, law firms are looking to include people from diverse backgrounds in their workforce, which has traditionally lacked women, people of color and members of the LGBTQ community.

### A Logical Link

Traditionally, people with STEM degrees who wanted to switch to a legal career would have to do a complete reset, with stellar LSAT scores and law school admissions officers sympathetic to following a nontraditional course of study. But increasingly, universities are recognizing the fit between the sciences and the law. Some law schools accept GRE scores rather than, or in addition to, the LSAT, and STEM graduates are increasingly recruited as viable candidates. Jessica Soban, associate dean for strategic initiatives and admissions at Harvard Law School, told *The Harvard Crimson* that the school started specifically seeking STEM applicants in 2012. Other law schools have been similarly receptive in recent years, with a variety of master's degrees available and different avenues to legal careers other than a juris doctorate and admission to the bar.

In February 2017, New York University announced a joint degree in STEM and law. The university's School of Law and Tandon School of Engineering established a Master of Science in Cybersecurity Risk and Strategy Program for executives. "It will take individuals with both technical knowledge and grounding in law and policy to determine how best to balance organizational security and individual freedom," NYU Tandon Dean Katepalli Sreenivasan said in a press release.

Similarly, Northwestern University's Pritzker School of Law offers a Master of Science in Law degree that marries the intersection of law, business and technology, with specific focus areas in business law and entrepreneurship, intellectual property and patent design and regulatory analysis and strategy, according to the program's website. The offering "is unique in that it is only open to students with STEM backgrounds,

and its classes are specially designed for this population of students."

For Datta, the decision to switch careers came in 2004 at a time when her husband was launching a startup and she was pregnant with their son. While her husband's nascent venture got off the ground, she sought a way to have a more stable income for the family that leveraged her academic experience in technology. She was familiar with the work of patent lawyers from her projects as a graduate student, and living near Washington, D.C., there were many firms that specialized in that area. "I realized that this could be a viable option for me," she recalls.

With her tech knowledge, she was an attractive candidate to firms seeking her expertise and willing to train her in relevant aspects of patent law. "Interacting with inventors at different technical companies, you need to speak their language," Datta says. "Often they are more comfortable speaking to a person with a deep technical background than a lawyer."

For three years, she worked at a patent law boutique as a technical specialist. She continued as a patent agent (the field allows non-law school graduates to pass the patent bar) when her husband took a job with Google and the family moved to Silicon Valley, where she first worked in the intellectual property group of a general law practice and then at another general practice firm where she assumed the work of a patent attorney who had left. She realized she was doing equal the work for less pay and without the possibility of making partner, so becoming a lawyer made sense. "A good patent agent eventually bites the bullet and goes to law school," she says.

Datta got her law degree at Santa Clara University and, after doing a mix of litigation and transactional work for a couple of years, decided to focus on patent prosecution. She joined the Tech Group and Patent Counseling and Prosecution division at Lowenstein Sandler in Palo Alto, California, last year, where she focuses on U.S. and international patent prosecution, patent portfolio management and counseling, analysis of patent validity and potential infringement and IP transactional and litigation support for clients ranging from startups to large corporations.

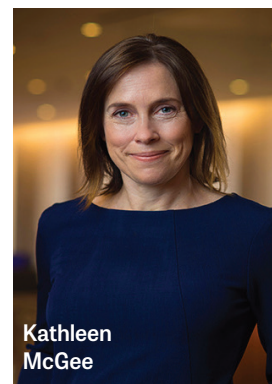
### Tech Clients Need Expertise

The complicated nature of technology and the variety of businesses in the field have raised the profile of tech practices at law firms as clients need attorneys well-versed in the challenges of the industry. "In my mind, saying technology is a bit like saying air — it's becoming a very ubiquitous thing," says Kathleen McGee, an attorney with Lowenstein Sandler's Tech Group and White Collar Criminal Defense division in New York. "There are some areas of law that haven't yet caught up with conceptually how technology is interfacing or permitting additional avenues of interaction between people. Privacy is a huge [area], for example. The ramifications of that are going to be tremendous. We're helping our legal society and our society as a whole deal with it in an elegant way."

McGee joined the practice following a long career in the public sector, including as bureau chief of the Bureau of Internet and Technology for the New York State Attorney General's Office, where she focused on regulation, enforcement initiatives and public policy involving privacy, data security and consumer protection. She previously served as director of the Office of Special Enforcement in the New York City mayor's office.

There is great potential for those working in this niche to have a huge impact on clients in the tech industry, especially in terms of helping companies behave ethically, McGee says. "The lawyers who are working in the area of tech law I consider some of the luckiest because we get to shape the law in a way that very few other practices do and help to inform some of the most sacrosanct aspects of what we as citizens consider to be part of our being. Privacy, who we are as people, what we value, that is being challenged now through technology platforms and companies at a micro and a macro level in a way that 10 years ago would have been unimaginable."

Another large area of focus in the legal industry is the internet and venture capital for startups. Ed Zimmerman, partner and chair of the Tech Group at Lowenstein



Kathleen McGee

Sandler in New York, says there is growing interest in this area among new hires. “We’re in a wave now where lot of people coming out of law school are connected to the space and are early adopters,” he says.

Zimmerman co-founded the firm’s Tech Group in 1998 and has an affinity for the clients he represents. “It was the people who were particularly compelling,” he says, adding, “It isn’t just entrepreneurs, it’s also investors, advisers, people who like working with these companies. I think there is a component of the natural risk-taking that I probably, early in my career, liked having a second-row seat for.”

He advises clients who are starting tech companies to consider the cost of capitalization, distributing equity and how people are going to add value to the venture over time. “A lot of mistakes companies expensively confront three years later arise because people have not really thought about future-proofing their stock ownership,” he says.

#### Diversity Becomes a Priority

The need for people with STEM backgrounds in law comes at a time when the profession is beginning to diversify. Progress is being made, though slowly. According to the American Bar Association’s National Lawyer Population Survey from 2017, women comprise 35 percent of resident active attorneys (up from 30 percent in 2007). The numbers of underrepresented populations are small and did not change greatly from 2007: 5 percent are African-American, 2 percent are Asian, 5 percent Hispanic, 1 percent is Native American and 2 percent are multiracial.

At firms like Lowenstein Sandler, diversity increasingly is valued internally, but some of the impetus is driven by clients who expect their attorneys to understand them and mirror what they look like, says A. Faith English, manager of diversity and inclusion at the firm’s office in Roseland, New Jersey. “It takes all of us to make change,” she says, “and that’s what I see happening in the legal industry.”

Zimmerman is one partner who takes



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diversity seriously and advocates on issues concerning race, women and the LGBTQ community. With the Obama White House’s liaison for LGBT matters, in 2014 he co-organized a summit of LGBTQ leaders in the tech community at the White House. In 2016, he co-organized a White House event about the future of work and artificial intel-

ligence. As founder of the firm’s VentureCrush series of tech events, he pledged against gender bias in tech, and he has been cited for his work toward gender equality in several books.

English has a law degree in public policy from Indiana University – Purdue University Indianapolis’ Robert H. McKinney School of Law and she brings her own experiences and advocacy on diversity to Lowenstein Sandler. After graduating, she worked at the state’s largest law firm where, as a woman of color, she was in the minority. “I feel I experienced some of the pain points that diverse attorneys face when they go into big law,” she recalls. “It didn’t have a name at the time. It wasn’t organized. People just didn’t think about it — it was what it was.”

After a few years, English left and worked extensively in the area of domestic violence survival advocacy and ran a legal clinic focused on family law issues. She began to view violence against women as a human rights issue and returned to law school to get an advanced degree, an LL.M. in international human rights law. Her continued work as an advocate for social justice led her to study the relationships between black women and white women, and with racial justice educator and writer Debby Irving, she co-founded the Black Women and White Women project “to untangle the branches that keep us from forming meaningful and authentic relationships.”

After leaving her own practice, English became associate director

of enforcement at the National Collegiate Athletic Association, where she also developed diversity and inclusion programs and strategies. She led programs about race and spearheaded a subgroup of white allies. “It’s important to include everybody in the solution,” she says. “People who were not from underrepresented groups could learn about how to become an ally, why it’s important and ask challenging questions and unsafe questions in a safe environment.”

With that expertise, last year English joined Lowenstein Sandler where she serves on the firm’s Diversity and Inclusion Committee and oversees the activities of employee resource groups including the Diversity Leadership Network, the LGBTQ Alliance, the Women’s Initiative Network, LS Parents of Young Children and the Women’s Enrichment Initiative.

She also is developing pipeline programs to recruit and retain diverse attorneys at the firm. “I read somewhere that black law students in particular have a lower rate of entering law firm practice after law school than any other group,” she says, noting that the firm is “committed to giving back to the communities and supporting kids and the education they receive from the jump because it impacts everything that follows. Once they get into the law firm, they want to support their careers so that they’ll want to stay and they feel they can grow and develop as attorneys.”

In her new role, English says she also is a visible example of what’s possible. “I’m sitting at the decision-making table, and it’s important for people who come here to see people who look like them in the various areas. Maybe because it was so much of a different time when I worked at the law firm ... I think I underestimated the im-

portance of having someone who looks like you at the power table to encourage you, to let you know it can be done, to model the best behaviors.

“At the same time,” she adds, “I think we undervalue the possibility of being the first. I have to appreciate I might be the person that people are looking at to see break that mold. ■



A. Faith  
English