Comparing the Performance of Artificial Intelligence to Human Lawyers in the Review of Standard Business Contracts

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{LawGeex}

ABSTRACT

In a landmark study, US lawyers with decades of experience in corporate law and contract review were pitted against the LawGeex AI algorithm to spot issues in five Non-Disclosure Agreements (NDAs), which are a contractual basis for most business deals.

Twenty US-trained lawyers, with decades of legal experience ranging from law firms to corporations, were asked to issue-spot legal issues in five standard NDAs. They competed against a LawGeex AI system that has been developed for three years and trained on tens of thousands of contracts.

The research was conducted with input from academics, data scientists, and legal and machine-learning experts, and was overseen by an independent consultant and lawyer.

Following extensive testing, the LawGeex Artificial Intelligence achieved an average **94% accuracy rate**, ahead of the lawyers who achieved **an average rate of 85%**.

This report provides insights into the methodology and the training of the LawGeex AI, a full breakdown of the results and findings, as well as interviews with lawyers who participated in the experiment, ultimately providing practical insights into AI's value for the future of law.

	NDA 1	NDA 2	NDA 3	NDA 4	NDA 5	AVG
LAWYER AVG	84%	85%	86%	86%	83%	85%
LAWGEEX	92%	95%	95%	100%	91%	94%

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INTRODUCTION

Artificial Intelligence (AI) is having a transformative effect on the business world, and the $600 billion global legal services market is not immune. Consultancy firm McKinsey estimates that 22% of a lawyer's job and 35% of a paralegal's job can be automated. For the legal profession, AI allows legal teams to automate certain processes, enabling them to devote their time to more valuable and strategic work.

Few would be surprised that Artificial Intelligence works faster than lawyers on certain non-core legal tasks. However, lawyers and the public generally believe that machines cannot match human intellect for accuracy in daily fundamental legal work. Lawyers are trained rigorously, with meticulous research skills based on a deep study of case law, and tend to believe that many tasks can only be carried out by trained legal professionals. The profession has been hardwired for decades to approach all legal tasks manually – even routine contracts.

In the experiment described in detail over the following pages, the performance of LawGeex – an AI contract review automation solution founded in 2014 – was tested in a core business and legal task: the review and approval of low-value, high-volume, day-to-day business contracts.

RESPONSE TO A BUSINESS PROBLEM

The study is a response to a major business problem experienced by every company of any size that requires contracts to engage with partners, suppliers, or vendors. The typical Fortune 1000 company maintains 20,000 to 40,000 active contracts at any given time, while The International Association for Contract & Commercial Management (IACCM) has found that 83% of businesses are dissatisfied with their organization's contracting process. In addition, NDAs take companies a week or longer to approve – a process that frustrates other departments and slows down deals. Businesses have reduced their reliance on outside law firms, as they want to pay less for legal services, but they are seeing no reduction in legal work. Only 28% of legal departments are hiring, while almost two-thirds of legal departments report an increase in the amount of legal work.

The review and approval of even simple contracts remain vital despite lawyers' time and budget constraints. Abigail Patterson, Corporate Attorney at US medical device company, De Royal, and one of the participants in the study, told researchers that even the most prosaic NDAs require lawyer review. "The implication of an NDA is strategic, especially when a company has trade secrets and proprietary information that the rest of the industry could utilize."

THE STUDY

Experts Consulted

A team of prestigious law professors and veteran lawyers established and reviewed a list of 30 proposed legal issues that might appear in a standard NDA. These legal issues formed the basis of those used to test the issue-spotting accuracy of the participant lawyers and the LawGeex AI. This academic team included:

Professor Erika J.S. Buell, Director of the Program in Law & Entrepreneurship, Duke Law, who draws on her extensive experience in corporate law and working with technology companies to teach courses in the area of entrepreneurship, financing, and transactions.

Professor Gillian K. Hadfield, the Richard L. and Antoinette Kirtland professor of law and professor of economics at the University of Southern California.

Bruce Mann, a former senior partner at top US law firm, Morrison Foerster, who has handled more than 300 IPOs, over 200 mergers and acquisitions, and has been recognized with a Lifetime Achievement Award as one of the top corporate lawyers in America.

The study was overseen by experienced independent lawyer and consultant **Christopher Ray**. Ray is a graduate with distinction from Suffolk University Law School and is licensed to practice law in Massachusetts and New Hampshire. To score the tests, Ray used the approved list of 30 legal concepts approved by the experts above. The scoring of contract reviews by participants factored in the best answers of all 21 participants (including the LawGeex AI) to create "model answers." This formed the benchmark for scoring the answers.

The overall scope of the test also involved collaboration with a number of other academics, including:

Beverly Rich, a Ph.D. student in Strategy at USC Marshall School of Business, who holds a J.D. from USC Gould School of Law and researches how firms use legal strategies to gain competitive advantage.

Dr. Roland Vogl, Executive Director of the Stanford Program in Law, Science, and Technology, and a Lecturer in Law at Stanford Law School.

Professor Yonatan Aumann, Professor in the Department of Computer Science at Bar Ilan University.

THE CHOICE OF NDA CONTRACTS

Five publicly available NDA agreements from the Enron Data Set, which has become the industry standard corpus for common documents for technology providers, scientists, and researchers, were selected by consultant and referee, Christopher Ray.

The NDAs were real, everyday agreements used by companies in the US, including Enron, InterGen, Pacific Gas and Electric Company, and Cargill. The five contracts were various forms of commercial NDAs – one 2-page NDA, one 3-page NDA, two 4-page NDAs, and one 5-page NDA. The full list of contracts are listed and downloadable in Appendix 1.

These documents had never been processed by the LawGeex algorithm. The AI reviews new contracts, like those in this test, based on tens of thousands of other NDAs it has been trained on. This test replicates a real-world scenario in which a new contract is uploaded for the first time to LawGeex by one of its customers.

THE TEST INSTRUCTIONS

Lawyer participants were asked to identify and highlight topics where they appeared in the contracts. The exercise asked lawyers to:

- Set aside what they knew about specific issues and instead stick to the definitions provided.

- Use a simple drop-down menu to identify the correct issues and where they appeared in each of the five contracts (see Appendix 3 for the full list of 30 issues and explanations given to participants).

In the post-interview questionnaire, 100% of participants said the test was clear, credible, and precisely modeled on the way they currently review NDAs.

The study asked each lawyer to annotate five NDAs according to the Clause Definitions (Appendix 3). Each lawyer was given four hours to find the relevant issues in all five NDAs.

Gil Rosenblum

"It is not enough to merely skim the agreements; a deeper analysis is required. For example, identifying all information that might be excluded from the definition of protected information. If either the AI or a lawyer missed an exemption relevant to the contract, he or she (or it, in the case of the AI) was deducted points for accuracy. Similarly, they were penalized if they mistakenly identified an exemption where it was irrelevant. To achieve the maximum score, each participant had to identify the right topics in the right places."

LawGeex Head of Data Gil Rosenblum, a US-trained lawyer-turned data scientist

THE LAWYERS

Recruitment of Participants

The lawyers chosen for this study were thoroughly vetted to ensure participation of only highly-experienced and US-trained lawyers with significant commercial experience in this exact form of NDA review.

Lawyers were recruited through a variety of sources, including the freelance hiring website Upwork, and top lawyers sourced from the research team's network. Participants came from a range of different backgrounds, comprising sole practitioners, in-house lawyers, and those from general counsel and law firm backgrounds. Legal and contract experience spanned companies including Goldman Sachs and Cisco, and global law firms including Alston & Bird and K&L Gates. The lawyers were compensated to replicate the conditions of a real legal task (Appendix 2 provides a list of the lawyers who participated in the study).
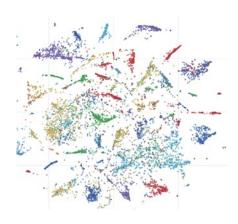
THE AI

Pre-Trained AI

The LawGeex AI has been trained to detect issues on more than a dozen different legal contracts, ranging from software agreements to services agreements to purchase orders. This specific research focused solely on NDAs – the most common form of business contract. NDAs are typically used to create a legal obligation to secrecy, and compel those who agree to them to keep information confidential and secure.

The LawGeex AI was trained on tens of thousands of NDAs, using custom-built machine-learning and deep learning technology. The machine was trained based on an exclusive corpus of documents that presented the LawGeex algorithm with a variety of examples, which allowed it to distinguish between different legal concepts.

This level of technology for analyzing legal documents has only been possible with advances in computing over the last five years. Computers convert the text into a numeric representation. The image below is a visualization of how computers read text. Each dot represents one paragraph in the semantic space. The different colors shown represent different legal issues. Pink dots, for example, represent samples of non-compete issues, and purple ones represent governing law sections.

Training an AI engine is similar to training a new lawyer – exposure to different examples is crucial in developing a deep understanding of the legal practice.

BARRIERS TO AI UNDERSTANDING CONTRACTS

Training AI on legal documents involves a number of unique challenges.

1. Legalese

Training is made more difficult by the common use of "legalese" – technical legal language that is often complex and counterintuitive. For the purpose of AI training, this form of language cannot be considered a natural language. For contract review and approval, Natural Language Processing (NLP) and off-the-shelf solutions do not work. No existing computational language models could read legalese coherently.

2. High Accuracy Required

The primary role of a lawyer is to control and even reduce risks for their company or clients, making accuracy vital. In legal AI training, single document analysis requires much higher accuracy levels than, for instance, big data "sentiment" analysis (the process of using text analytics to mine various sources of data for opinions in order to predict trends).

LAWGEEX SOLUTIONS

■ Creation of a new legal "language" — LawGeex created proprietary Legal Language Processing (LLP) and Legal Language Understanding (LLU) models for the task. Teams of lawyers and engineers taught LawGeex AI legalese by exposing the AI to a wide range of legal documents. Once the AI learned legalese, legal trainers pointed out the concepts it is required to recognize. The LLP technology allows the algorithm to identify these concepts even if they were worded in ways never seen before.

■ Monitoring concepts, not keywords — LawGeex AI operates in a far more sophisticated manner than a blunt "keyword search." Keyword searches can be over- and under-inclusive, as words may be absent from relevant documents, or present in irrelevant documents. True AI recognizes a concept however it is phrased or wherever it appears in a document.

HOW RESULTS WERE CALCULATED

To mark the tests, consultant Christopher Ray ultimately measured the participants' performance based on three metrics:

- **False Negative** – an issue was missed

- **False Positive** – an issue was misidentified

- **True Positive** – an issue was accurately identified

This was then used to create three final metrics:

- **Recall:** how many topics were accurately spotted in the right place out of the total number of topics possible to detect. As a standalone measurement, recall is insufficient as it allows one to achieve the maximum score through guesswork.

- **Precision:** measures the number of correct answers made against the number of total answers given.

- **F-measure:** the final accuracy score is the harmonic mean between Precision and Recall, calculated as follows:

$$\frac{2}{\frac{1}{Precision} + \frac{1}{Recall}}$$

Following two months of testing, the LawGeex Artificial Intelligence achieved an average **94% accuracy rate**, ahead of the lawyers who achieved **an average rate of 85%**.

On average, it took 92 minutes for the lawyer participants to complete all five NDAs. The longest time taken by a lawyer to complete the test was 156 minutes, and the shortest time to complete the task by a lawyer was 51 minutes. In contrast, the AI engine completed the task of issue-spotting in 26 seconds.

The AI engine achieved 100% accuracy in one of the contracts. The highest individual score for a lawyer on a single contract was 97%.

THE RESULTS AND FINDINGS

	NDA 1	NDA 2	NDA 3	NDA 4	NDA 5	AVG
Lawyer 1	83%	92%	88%	79%	88%	86%
Lawyer 2	85%	92%	86%	81%	93%	87%
Lawyer 3	85%	72%	80%	79%	81%	79%
Lawyer 4	61%	58%	74%	76%	65%	67%
Lawyer 5	93%	90%	93%	94%	93%	92%
Lawyer 6	89%	90%	94%	97%	90%	92%
Lawyer 7	74%	81%	86%	84%	91%	83%
Lawyer 8	93%	84%	90%	90%	95%	91%
Lawyer 9	62%	80%	81%	73%	57%	70%
Lawyer 10	84%	94%	82%	88%	89%	88%
Lawyer 11	87%	82%	83%	87%	82%	84%
Lawyer 12	65%	67%	70%	69%	55%	65%
Lawyer 13	76%	67%	72%	71%	73%	72%
Lawyer 14	95%	92%	91%	97%	91%	93%
Lawyer 15	92%	94%	95%	97%	89%	94%
Lawyer 16	95%	97%	94%	97%	92%	95%
Lawyer 17	88%	92%	81%	89%	91%	88%
Lawyer 18	81%	86%	85%	88%	78%	84%
Lawyer 19	97%	94%	95%	97%	91%	95%
Lawyer 20	97%	93%	90%	94%	81%	91%
LAWYER AVG	84%	85%	86%	86%	83%	85%
LAWGEEX	92%	95%	95%	100%	91%	94%

Professor Yonatan Aumann

"The technology has been developed through a combination of supervised and unsupervised learning techniques. Unsupervised learning was used for teaching the AI engine the core legalese language. Thereafter, supervised learning, using deep learning multi-layer LSTM and convolution technology, was used to train the system for the fine-tuned issue-spotting. Supervision was performed based on human-annotated documents, using legal experts. A unique augmentation algorithm was applied to boost learning from these examples.

The overall result is the most advanced technology for the automatic analysis of legal documents. The p-value for the statement that accuracy of AI is above that of these lawyers is 0.0068 (using Mann-Whitney's U test)."

Professor Yonatan Aumann lectures in the Department of Computer Science at Bar Ilan University and is an advisor to LawGeex

SELECTION OF PARTICIPANT RESPONSES

Grant Gulovsen

"Participating in this experiment really opened my eyes to how ridiculous it is for attorneys to spend their time (as well as their clients' money) creating or reviewing documents like NDAs which are so fundamentally similar to one another. Having a tool that could automate this process would free up skilled attorneys to spend their time on higher-level tasks without having to hire paralegal support (thereby making the services they offer more competitive in the long run)."

Grant Gulovsen, an attorney with more than 15 years' experience

Shena Shenoi

"The test gave me a practical glimpse into how technology can automate a staple of the legal profession – reviewing NDAs. The type of issue-spotting carried out is credible and quite similar to how we (manually) do this type of work and have for decades."

Shena Shenoi, a Harvard-educated business lawyer, and NDA expert

Hua Wang

"LawGeex asked me to review the NDA in a logical and credible manner, similar to how I reviewed documents as a lawyer at a global law firm. Law firms would charge thousands of dollars for such an assignment."

Hua Wang, lawyer formerly at Proskauer Rose and K&L Gates, 5+ years' experience as a lawyer

Zakir Mir

"It is crucial to make mundane contract work more efficient, especially when there are 50-100 pages of contracts for some major deals (M&A large tenders with agreements or multinational corporations). It can really help lawyers sift through these documents, and cut down on the sometimes-deliberate verbosity of these documents which can allow one party to mask core issues."

Zakir Mir, former regional counsel for BDP International, a $2billion global logistics firm, now at Allegiance International, and test participant

Peter Cook

"As an attorney who has participated in LawGeex's research studying AI's ability to navigate non-disclosure agreements, I believe LawGeex has created a reliable system for reviewing contracts using AI. LawGeex is onto something big."

Peter Cook is an experienced attorney in family law, civil litigation, contract law, business law, and various other areas of law

Seun Adebiyi

"We are seeing disruption across multiple industries by increasingly sophisticated uses of Artificial Intelligence. The field of law is no exception. The correct identification of basic legal principles in contracts is the kind of routine task that may be amenable to automation. Using AI to spot routine issues in non-disclosure agreements could be a useful time- and cost-saving development for the legal industry as a whole."

Seun Adebiyi, former corporate attorney at Goldman Sachs

BREAKTHROUGH IN THE HISTORY OF AI VS LAWYERS

While this study is not the first to pit AI against humans in the field of the law, it is certainly the most evenly-matched scenario ever undertaken. Most recently, CaseCrunch, an AI legal startup, recruited lawyers in a "Man vs Machine" battle. This case saw English lawyers presented with scenarios of customer claims in cases of alleged improper selling of Payment Protection Insurance (PPI) by financial institutions to UK customers (PPI policies had been improperly sold, in some cases, alongside mortgages to repay people's borrowings if their income fell after losing their jobs).

The lawyers were simply asked to predict whether the claim would succeed or not, in front of the UK's Financial Ombudsman, the regulatory body charged with investigating claims. The scenarios were real-life cases already decided by the Ombudsman. However, lawyers who took part did not have any expertise in PPI cases. In a similar manner, an AI system in Europe is predicting legal decisions made by the European Court of Human Rights with an accuracy rate of 79%. In both cases, this form of AI is helping lawyers with advice, rather than with commoditized legal work.

The LawGeex AI challenge differs in a number of important respects than any previous such study. It ensured significant expertise of the lawyers in the exact area of law it was assessing. The study also ensured that all participants carried out precisely the same task. Dr. Roland Vogl, Lecturer in Law at Stanford Law School, and consultant on this project, says: "The Robo-lawyer really has two faces. One is mechanizing and automating legal services – commoditized legal work and document checking. Legal prediction is the other aspect. This test falls in line with the first type of AI automation."

IMPLICATIONS FOR THE FUTURE OF LAW

The study underscores the fact that legal AI is faster and more accurate than human lawyers, in certain tasks. Practically, for over-extended lawyers carrying out everyday contract review, this technology allows them to focus on only relevant sections of a contract, pre-validated by the AI. This speeds up initial contract review in this case from an average of 92 minutes to 26 seconds.

This is part of a wider technology-driven disruption which has already created a shift in the legal profession. The adoption of AI by many legal departments and law firms arrives as in-house lawyers are facing "a more for less" challenge, and a requirement to act more strategically and make better use of technology. US law firms for their part are turning to AI solutions as they experience sluggish growth in demand and decline in productivity. More than half of in-house counsel believe the impact of automation will be "significant" or "very significant" while only 3% believe automation will have no impact at all. Altman Weil found that, of the 386 US firms participating in its *2017 Law Firms in Transition* survey, half report they have created special projects and experiments to test innovative ideas or methods, and 49% indicate they are using technology to replace human resources with the aim of improving efficiencies.

Professor Gillian Hadfield

"I think it's important to recognize that this experiment actually understates the gain from AI. The lawyers who reviewed these documents were fully focused on the task: it didn't sink to the bottom of a to-do list, it didn't get rushed through while waiting for a plane or with one eye on the clock to get out the door to a meeting or to pick up kids. The margin of efficiency may be even greater than the results presented here.

"In the 2017 Altman Weil Survey, Chief Legal Officers were asked 'what is the most important internal task, project or initiative that is going undone because your law department doesn't have the resources to address it?' The top two answers tied: contract management and people development. AI can help solve both problems – by making contract management faster and more reliable, and freeing up resources so legal departments can focus on building the quality of their human legal teams."

Professor Gillian K. Hadfield is the Richard L. and Antoinette Kirtland professor of law and professor of economics at the University of Southern California.

Professor Erika Buell

"Not only should use of the AI provide consistency and predictability in a client's contracts, thus providing better client protection, but it also should allow lawyers to focus on the highest and best use of their time."

Professor Buell is Director of the Program in Law & Entrepreneurship at Duke Law.

THE FUTURE DIRECTION OF AI IN THE LAW

In some ways, the reaction to these findings could resemble the legal profession's hesitation to adopt predictive coding, first shown as more accurate and consistent than traditional eDiscovery more than a decade ago. It is clear that with this revolution, lawyers will not be granted a decade to make similar decisions to use AI technology. The American Bar Association (ABA) has already modified its rules to extend a lawyer's duty of competence to keep "abreast of changes in the law and its practice" to include knowing "the benefits and risks associated with relevant technology." Many State Bars have followed, extending lawyer "competence" beyond knowledge of substantive law to a duty of technological competence.

In this scenario, lawyers failing to capitalize on the competitive advantage of technology are unlikely to thrive into the next decade.

In the words of John O. McGinnis, Professor of Constitutional Law at Northwestern University School of Law, and Professor Russell G Pearce at Fordham University School of Law: "Intelligent machines will become better, both in terms of performance and cost. And unlike humans, they can work ceaselessly around the clock, without sleep or caffeine. Such continuous technological acceleration in computational power is the difference between previous technological improvements in legal services and those driven by machine intelligence."

This accuracy leads to another enhancement brought by technology. AI offers an historic opportunity to tackle widespread inconsistency when delivering legal services. Lucy Bassli, former Assistant General Counsel at Microsoft, says in some cases she discovered five paralegals who all perform the same function of reviewing contracts doing it in five very different ways. In contrast, AI remains consistent. The AI engine applies the same contract rules – pre-approved by a legal decision-maker – in every review.

CLOSING ARGUMENTS: AI AND LAWYERS TOGETHER

This study represents a major landmark in the history of legal technology. Highly experienced corporate lawyers point to the use of such technology as being a necessity for lawyers today. Bruce Alan Mann, a veteran lawyer with more than 30 years' experience handling major corporate deals in the US, and advisor for this experiment, says: "Artificial Intelligence is providing a way to analyze legal documents far faster and more accurately than any lawyer could do. Starting with a few basic corporate and business forms, LawGeex holds the promise of better, faster, and less expensive document review."

However, undue weight should not be put on Legal AI alone. Lawyers must play a vital role in strategic legal work for the foreseeable future, and use technology to become even more competitive and impactful. The reality of this powerful technology is that it is not meant to be, nor indeed is it currently capable of being, used as a standalone tool. The goal is to use AI plus humans (as airplane pilots use autopilot). Together, they can ensure that contracts are reviewed much more accurately — and more consistently — than a human or technology alone. Justin Brown, Partner at Brown Brothers Law, and participant in the study put it this way: "As a chess player and attorney I will take from Grandmaster Vishy Anand and say the future of law is 'human and computer' versus (another) 'human and computer.' Either working alone is inferior to the combination of both. I view AI and technology as exciting new tools that would allow for such drudgework to be done faster and more efficiently."

In the words of a recent Gartner Report, *Cool Vendors in AI for Legal Affairs*, leading and innovative legal firms and organizations should not view these new technologies as "only strategic investment for better and more cost-effective services." Beyond this, the current application of AI is already improving lawyers' fundamental role as trusted advisors. This helps secure the legal professional's relevancy, allowing them to remain competitive into the next decade.

APPENDIX 1 THE CONTRACTS

DOCUMENT NAME	PARTY A	PARTY B
Enron confidentiality agreement	InterGen North America Development Company LLC	Houston Pipe Line Company and Enron North America Corp.
Standard form Confidentiality agreement 7-05-01	PG&E Gas Transmission, Northwest Corporation	Blank
Confidentiality Agreement1	RealEnergy, Inc	Blank
NDA-Cargill (enroncomments 5-16-01)	CARGILL, INCORPORATED	ENRON NET WORKS, LLC
Caithness CA NRL	Caithness Big Sandy, LLC	Transwestern Pipeline Company

APPENDIX 2: THE PARTICIPANTS

Zakir Mir

Zakir Mir is a licensed attorney. He studied law at Drexel University in Philadelphia, Pennsylvania, and is also a member of the Pennsylvania Bar. He has extensive experience in corporate and contractual matters, having served as counsel for BDP International.

www.zakirmir.com

Grant Gulovsen

Grant is an attorney with over 15 years' experience in entertainment, employment, contract, corporate and intellectual property law. He is involved in the cryptocurrency ecosystem, while also advising ICOs about US securities laws.

https://www.linkedin.com/in/gulovsen/

Abigail Patterson

Abigail is a corporate attorney at US-based medical device manufacturer DeRoyal Industries. She is licensed in both Tennessee and Wisconsin and has worked as an In-House Attorney, HR/Employment Law Attorney, and Special Projects Manager.

Shena Shenoi

Shena, Legal Head to Mahindra's Solar Power, is a Harvard-educated lawyer now working at a global company.

Ryan Wynn

Ryan has over five years' legal practice experience in New York and Washington DC advising small businesses, entrepreneurs, and individuals on contract issues, corporation/LLC/Partnership formation, IP issues, labor/employment issues, and other legal issues.

Tmara Abidalrahim

Tmara, a Contract Compliance Officer at the Housing Authority of the City of Milwaukee, is an experienced corporate lawyer. Her day-to-day work entails drafting contracts, monitoring compliance with contract terms, and ensuring compliance with applicable state and federal regulations.

Jessica Wahl

Jessica is a law office sole practitioner who manages civil cases, including product liability, personal injury, and contract disputes. She has previously worked as a law clerk and as an associate at a law firm

Samantha Javier

Samantha Javier is a Lewis & Clark Law School graduate, licensed to practice law in Oregon. Her experience includes law firm, in-house, and transactional work.

https://www.linkedin.com/in/samantha-javier-a2973246/

Justin Brown

Justin is Partner at Brown Brothers Law LLP and has experience across transactions, contract modification, operating agreements, company formation documents, website privacy policies and terms of service, and other related legal documents.

www.brownbrotherslaw.com

Seun Adebiyi

Former corporate attorney at Goldman Sachs, and board member of several non-profit organizations, Seun has nearly a decade of legal and business experience.

Daehoon Park

Daehoon Park is a business and blockchain lawyer with extensive experience in commercial and corporate matters. His practice encompasses negotiating and drafting the full range of corporate documents, commercial and intellectual property agreements as well as legal documents for IT and tech companies. He has assisted businesses with incorporation, financing, regulatory compliance, contractual and commercial documentation. Moreover, he has assisted many cryptocurrency startups with a white paper and token sale agreements for ICOs as well as SEC regulatory compliance.

Paul Vincent

Paul Vincent is currently an attorney at Mills, Mills, Fiely and Lucas. Paul has assisted clients from the very early stages of building a business all the way through to the sale of a successful company.

Peter Cook

Practicing in Boise, Idaho, Peter is an experienced attorney in family law, civil litigation, contract law, business law, and various other legal areas of law.

https://www.nwlawgroupid.com/

Jesse Hansen

Jesse is an in-house counsel at the National Benefits Service. He is an expert in Contract Drafting Negotiation, Data Security, and Employment Law.

Hua Wang

Hua is Co-Founder of SmartBridge, and formerly a lawyer at K&L Gates and Proskauer, in-house counsel at Cisco Systems, and a Global Scholar at the Kauffman Foundation. Hua graduated from Duke University and Northwestern University School of Law.

www.smartbridgehealth.com

Heather Hormel Miller

Heather has 15 years of experience as a transactional, corporate, litigation, and government contracts attorney at law firms and in-house. Specialties include software licensing, healthcare and clinical research, compliance and government contracts.

https://www.linkedin.com/in/deja-colbert-030688100/

Yaakov Har Oz

Yaakov is Senior Vice President and General Counsel of Arotech Corporation, a US Nasdaq-listed company and its wholly-owned Israeli and US subsidiaries, where Yaakov is responsible for all SEC and Nasdaq compliance work, financing, acquisitions, commercial contracts, and supervision of litigation. He graduated from Vanderbilt University Law School.

Dallas Verhagen

Dallas is a startup, small business, and employment attorney in Santa Monica, California, who runs a law practice that is focused on business and employment transactions, handling a range of corporate matters.

Deja Colbert

Deja is a contracts administrator at Omega Rail Management where she drafts contractual documents and coordinates negotiation of the terms and conditions accordingly, creating abstracts of property-related agreements. She was formerly a contract specialist at Cox Automotive in Atlanta and American CyberSystems in Duluth and Experian Health.

Jack West

From Birmingham, Alabama, Jack West is a former attorney at Cabaniss, Johnston, Gardner, Dumas & O'Neal LLP, who has now founded a legal start-up called Book-It-Legal. He studied at University of Mississippi School of Law. He focused on the areas of securities, corporate, real estate, and tax law.

ISSUES	DESCRIPTION	ONE OF MANY POSSIBLE EXAMPLES
Arbitration	The right or obligation to settle disputes in arbitration, and the rules and procedures governing the arbitration	All disputes, disagreements or claims related to the performance, breach, cancellation, or nullity of this Agreement shall be exclusively settled at arbitration conducted by the Japan Commercial Arbitration Association in Tokyo, Japan in compliance with the arbitration rules thereof.
Assignment of agreement	The right or restriction on assigning the Agreement	Neither party may assign this Agreement without the express written consent of the other party, provided that either party may assign this Agreement pursuant to a merger, acquisition, or sale of all or substantially all of such party's assets except in the event that the proposed assignee is a competitor of the other party.
Confidentiality of Relationship	Restriction on public announcements and/or treating the following information as confidential: 1. The fact that the parties have signed an NDA. 2. That the parties are talking to each other. 3. That the parties are contemplating a transaction.	Neither Party shall use the names trademarks or trade names whether registered or not of the other Party or publicly refer to the other Party or the existence of this Agreement in publicity releases, promotional materials, business plans, investment memoranda, announcements or advertising or in any other manner without securing the other Party's prior written approval.

Definition of Protected Information	The information that is protected including the form of the information and the way it is disclosed	Confidential Information means any and all technical and non-technical information provided by either Party to the other, whether conveyed orally, in writing or otherwise (whether or not designated as "confidential information").
Exclusion — Compelled Disclosure	Information recipient must disclose by law, including procedures related to giving notice to the disclosing party and/or seeking protective order	The confidentiality obligations hereunder shall not apply with respect to information that Recipient is required by law, court order, a government agency, or a stock exchange to disclose; provided that in such case Recipient shall give the Disclosing Party as early notice of the requirement to disclose the Information as reasonably practicable and assist the Disclosing Party to challenge such disclosure if appropriate, subject to confidentiality protection to the extent possible.
Exclusion — Independent Development	Information that a party comes up with on its own, without using the other side's confidential information, does not receive confidential treatment	Confidential Information does not include any data or information that has been developed independently by Recipient without access to the Confidential Information.
Exclusion — Information from Third Party	Information received from a third party	The confidentiality obligations hereunder shall not apply with respect to information that was rightfully received by Recipient from a third party without restriction and without knowledge of any obligation of confidentiality between the third party and Discloser.

Exclusion — Prior Knowledge	Information Recipient already had before the discloser disclosed it is not confidential	The term "Information" as used herein does not include any data or information which is already known to the receiving party at the time it is disclosed to the receiving party.
Exclusion — Public Domain	Information that's already publicly known, or becomes publicly known, is not confidential	Protected Information does not include any data or information which before being divulged by the receiving party has become generally known to the public through no wrongful act of the receiving party.
Export Limitations	Restrictions on "exporting" certain kinds of confidential information	Each party shall comply with all United States and foreign export control laws or regulations applicable to its performance under this Agreement.
Governing Law & Dispute Resolution	1. State or country's laws applicable to this NDA. 2. Process for resolving disputes	This Agreement shall be governed by and construed in accordance with the laws of the State of New York without reference to any conflict of law legislation that may be applicable.
Indemnification	The obligation or the right to indemnify or be indemnified by either party	Each party shall defend, indemnify and hold the other party, its officers, employees, and agents, harmless from and against any and all liability, loss, expense including reasonable attorneys' fees, or claims for injury or damages arising out of the performance of this Agreement.
Independent Contractors	No employee-employer relationship, joint venture, or partnership	The relationship of the parties is that of independent contractors. This Agreement does not create an agency, partnership or similar relationship between the parties.

Injunctive Relief	Language concerning a party's right to prevent the other party from improperly using or revealing the information by seeking a court order, including other equitable remedies	Breach of the terms hereof shall give rise to irreparable harm, and it is agreed that enforcement of the terms hereof may be by means of injunction or other equitable remedy in addition to any other remedy available.
Liability for Third-Party Disclosures	Responsibility for disclosures by a party's contractors or any other third parties provided with the confidential information	Each Party shall be liable for the acts, omissions, and defaults of any person to whom it has passed Proprietary Information which cause a breach by that person of the obligations contained in Clause 3 (as if such a breach would be a breach had the relevant Party committed it itself).
Limitation of Liability	The exemption or limitation of liability with regard to the use or disclosure of the confidential information, including cap liability	Neither the Company nor any Company Representative shall have any liability to the Recipient or any other person (including, without limitation, any Recipient Representative) resulting from the Recipient's use of the Confidential Information, except as may be expressly provided in any definitive agreement (as defined below) entered into in order to consummate a Potential Transaction.
Marking of Confidential Information	If information may be marked or is required to be marked confidential in order to receive confidential treatment and excluding instances in which the language of the contract designates marking as completely irrelevant	For purposes of this Agreement, "Confidential Information" shall include any and all information regarding the Disclosing Party facilities or operations which is marked "Confidential" or "Proprietary."

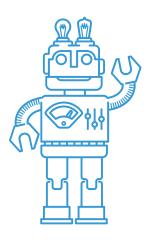|		
Need to Know	Disclosing information to certain persons is allowed on a need-to-know basis	The Receiving Party agrees to limit its internal disclosure of Confidential Information only to those of its employees who need to know such information for the Purpose.
No Future Obligations	NDA does not create future obligations to enter into a contract, a transaction or any other obligation	The Company shall not be obliged to enter into any further agreement or make any further disclosure to the Receiving Party.
No Other Rights	No additional rights (such as a license) to use the discloser's information beyond what's specifically allowed in the NDA	The Recipient acknowledges the Disclosing Party's assertion that it is the exclusive owner of the Confidential Information. Recipient agrees that it acquires only the right to review and evaluate the Confidential Information disclosed to it only for the Purpose and does not acquire any ownership rights or title or other license rights to the Confidential Information.
Non-Compete	Obligation not to compete with the other party	EvilCorp hereby agrees that it shall not compete with the business of the Company, or its successors or assigns during the term of this Agreement and for 24 months following its termination or expiration.
Non-Solicitation	Obligation not to solicit employees, clients and the likes from the other party	During the term of this Agreement and for a period of two (2) years after the termination of this agreement, the Contractor shall not solicit business from the customers, clients, suppliers, affiliates, joint ventures, representatives or agents of the Company unless prior written authorization is received from the Company.

Oral Disclosure of Confidential Information	Whether oral disclosure may receive confidential treatment	For purposes of this Agreement, "Confidential Information" means any data or information that is proprietary of the Disclosing Party and not generally known to the public, whether in tangible or intangible form, whenever and however disclosed, whether disclosed in written (including by fax), orally, visually, electronically, or by any other means.
Return or Destruction of Protected Information	The obligation to return or destroy the disclosed information	At any time upon written request by the Disclosing Party, the Receiving Party shall promptly deliver to the Disclosing Party all documents or other materials constituting Confidential Information together with all copies thereof without retaining a copy of such material.
Reverse Engineering	Obligation of the receiving party not to reverse engineer the confidential information	The Receiving Party agrees not to reverse engineer, disassemble or decompile any prototypes software or other tangible objects that embody the Disclosing Party's Confidential Information.
Right to Independent Development	The right to develop products, technologies, etc. related to the confidential information being shared under the NDA	This Agreement shall not be construed to limit either party's right to independently develop or acquire products or services of the same type as may be included within any Confidential Information.
Standard of Care	How careful a party has to be in protecting the other side's information	In protecting the Confidential Information, the receiving party shall exercise at least the same degree of care it uses with its own Confidential Information, but no less than reasonable care.

Term of Confidentiality	How long will the information remain confidential	The Receiving Party's obligation to keep confidential the Confidential Information shall survive for 2 years after termination of this Agreement.
Use for Purpose	Restriction on using the information for specific purposes	The Recipient agrees that it will not copy or use the Confidential Information except for the purpose of performing the Services.
Warranty — Disclaimers & Limitations	Disclaimer as to the usefulness or accuracy of the information	Confidential Information is provided "as is" (excluding Work Products). In no event shall the Disclosing Party be liable for the accuracy or completeness of the Confidential Information.

ABOUT LAWGEEX

LawGeex (www.lawgeex.com) is transforming legal operations using artificial intelligence, and helping businesses save hundreds of hours and thousands of dollars reviewing and approving everyday contracts.

Founded in 2014 by international lawyer Noory Bechor and leading AI expert Ilan Admon, LawGeex enables businesses to automate their contract approval process, improving consistency, operational efficiency and getting business moving faster.

LawGeex combines machine learning algorithms, text analytics and the knowledge of expert lawyers to deliver in-depth contract reviews using the legal team's pre-defined criteria. LawGeex removes the legal bottleneck, helping customers and their legal teams focus on the big picture without getting lost in the paperwork.

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