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COGNITIVE GENERATION OF CASE STUDIES AND LAW

VASAVI H. V.¹&KARAN KHIVESRA²

“Travelling ahead of time to see and conquer the unknown boundaries of mankind.”

PROPOSAL

The Idea, the authors proposal hinges on the ability of Artificial Intelligence to generate new data basis knowledge previously gathered by the system. AI powered by powerful neural networks trained on historical data can create new datasets basis information patterns in the past. In the context of law, the ability to create new instances helps generate new ‘**fictitious**’ case laws basis patterns in the thousands of historical cases, allowing students and Advocates to practice on newer problems that could potentially occur in the future.

NEED OF THE HOUR

The principles that governs the functioning of technologies like AI and machine learning is very similar to the way a human brain would function. For example, an author of a novel usually gets into creative writing by taking inspiration from other books he/she has read. What if an AI bot could take inspiration from the heaps of law data and case studies that exist to create new cases that have never existed?

There are a few points to note about these rules-based knowledge-representation systems. Once rules are represented in a computer-programming language, a computer can manipulate these rules in deductive chains to come to nonobvious conclusions about the world. These systems can combine facts about the world, using logical rules, to alert users about things that might be too difficult for a person to figure out on their own when it arises in future.

¹VASAVI H. V. [X Sem, 5 Yrs., B.A. LL.B]; E-mail: vasavihv305@gmail.com
Perusing law at **B. M. S. College of Law**, Bangalore.

²KARAN KHIVESRA [X Sem, 5 Yrs., B.A. LL.B] E-mail: karankhivesra1773@gmail.com
Perusing law at **Dr. Rammanohar Lohia College of Law**, Bangalore.

Indian Courts are flooded with a multitude of new cases each day, the timelines of which are uncertain. Cases similar to the ones previously solved usually get fast tracked, while newer more “unique cases” get stalled with trial uncovering new facets of the law to solve the issue in hand. Given the magnitude of “case studies” that exist within our database, what if AI could generate new “hypothetical” or fictitious cases for lawyers and advocates to discuss, plan and solve? The ability for a machine to create such cases expands the horizons of thought and experimentation as newer untested cases can be practiced and solved in a more controlled and academic manner.

HOW IS THIS MADE POSSIBLE?

At the core of Artificial intelligence and machine learning lies the neural networks. Neural networks are architectures that simulate the neurons in the nervous system of a human body. The way a machine learns and remembers information is very similar to way a human would learn. A neural network adapts to the real world as It constantly learns new information.

The idea proposed in this article is backed by the same technology of AI and neural networks. How authors take inspiration from other novels to write their own story, our AI system would learn from historical cases to write new, fictitious one in the same fashion.

Here taking Moot Court as referencethis can be better explained, as we all know in moot courts where students are given hypothetical fictitious cases to work with and come up with relevant arguments to build a case and they are allowed to put it forth to showcase how well they can argue and how well they have prepared themselves to win a case. Similarly, the AI functions like a moot court where it comes up with a nonexistent case which is the result of compilation of n number of cases which it has read through or with the data of cases it is fed with.

A special type of neural network called GAN or Generative Adversarial Networks is the solution



Generated by a GAN (Generative Adversarial Network)
 StyleGAN2 (100% 100%)
 Done! Paris, Learn how it works! [?] [?] [?]
 Help: What AI generates to create (Creative AI)
 Code for training your own GAN (GitHub)
 Art - Create - Generate - Adversarial - Neural Networks | Office
 Available | Save

to the mechanism. GAN was invented by Ian Goodfellow as a way to generate new data basis historical references. If the network is fed with historical data, which in our problem is the database of case studies, the machine learns the various patterns in the cases and using statistical models would then generate an output. One of the active solutions that use GAN is a product called “This person does not exist”. This product uses AI to create

pictures of people who are not real (picture of a man on the left), basis the database of million

images it has stored as knowledge.³ GANs are relatively new and have implemented in a plethora of Industries like Science, Art and Video Games.

Additionally, knowledge-based AI systems can harness the power of computing to reveal hard-to-detect details, such as contradictions embedded in systems that a human would not be able to discern.

Just last year it was announced that [students at University College London and the University of Sheffield had successfully developed artificial intelligence software](#) that can predict the outcome of human rights cases by analysing previous court judgements. This story certainly sounded like science fiction, but the AI software came to verdicts with an astonishing 79% accuracy, when such miracles can be done by AI our idea of cognitive generation of cases is the future step which is achievable and would help everyone beyond imagination.

ADVANTAGES OF THE PROPOSAL

- **Being well-equipped and prepared-** Practicing on these fictitious cases can allow us to be well equipped and prepared when cases similar to the ones generated by the machine does come out in the public.
- **Identification of prospective loopholes in law-** New hypothetical and machine generated situations helps us be proactive to identify loopholes and inconsistencies in our law that otherwise wouldn't have been found till the situation arises.
- **Application and thought process of students-**Students learning law will have a clear understanding of the subject matter with improved practice and trial.
- **Prevention of wrongful punishment-**Reduces possibility of wrongful punishments.e.g. after the RBI imposed ban on crypto currency trading, several people were charged for the same. Later, Hon'ble Supreme Court invalidated RBI's ban and the move of RBI was arbitrary and without jurisdiction.
- **Saving of money-** Money of taxpayers is saved if the court's disposal of matter is sped up without too much experimentation.
- **Legal research and time consumption-** Researchers have an expanded scope and area to explore. Another evident advantage of AI is legal research and time-consuming quality. AI

³ <https://www.thispersondoesnotexist.com/>

driven legal research has a great potential in reducing the time required to prepare quality research. In today's legal panorama, clients expect to get the best opinion possible at a reasonable price. Companies and law firms that adopt this technique are being proactive at guaranteeing their clients walk away knowing they have received the best legal solution without paying extreme legal fee.

- **Creative thought process**-This will significantly increase the ability for Advocates and Lawyers to use creative thinking processes to solve problems. With the assistance of AI generated cases it tweaks the young and old minds to come up with solutions to the prospective interesting problems created which leads to better understanding and application of laws.
- **PhD thesis being solutions rather than mere subject choosing randomly to meet the curriculum**- The AI generated hypothetical problems can be chosen as thesis subject matter and extensive research can be done with data analysis and problem solving solution with application of mind, this can be brought into existence which will in turn serve the legal fraternity and public at large. Generally, PhD scholars/researchers have very limited scope to choose their thesis problem statement, but AI will come to their rescue with this. Most of the times the PhD thesis written is forgotten and the application of it is very less and its sitting in one corner, but here it is put to use if AI problem statement is chosen.
- **No escape from liabilities** -Just because the law isn't equipped with the solutions for the new problems the offender or wrong doer has many means to evade or get away without being held liable for his wrongful act. But with the implementation of our AI we can be ready and no offender can escape clutches of law.
- **Increases employment opportunities** - With AI hypothetical cases the law commission and various related bodies making law will create opportunities to the people who are well versed in various arena's and have technical knowledge to formulate new regulations and law.
- **Assists Judges in delivering justice**-Judges can foresee or analyze the upcoming cases, which might occur in future, if this isn't adopted when new topics like blockchains arise disputes, the judges will not be aware as to what is the domain and nature of issue before them and they'll have to spend considerable amount of time in understanding the basics and then venture into right or wrong of the issue before them .This leads to prolonging of cases and delay in delivering justice which would hinder easy disposal of matter.

- **Reduction in burden of Law Commission** - Law Commission is given a huge responsibility to make recommendations on various legal issues arising every day and it is a very wide territory to conquer, with the AI implementation the law commission can carry out their research way ahead before the problem pops up and they can recommend the best answer key to prospective issues.

CONCLUSION

The goal of this article is to provide a realistic, demystified view of AI and law. As it currently stands, AI is neither magic nor is it intelligent in the human-cognitive sense of the word. Rather, today's AI technology is able to produce intelligent results without intelligence by harnessing patterns, rules, and heuristic proxies that allow it to make useful decisions in certain, narrow contexts. Knowing the strengths and limits of current AI technology is crucial to the understanding of AI within law. It helps us have a realistic understanding of where AI is likely to impact the practice and administration of law and just as importantly, where it is not.

Machine age is imminent because it is easier now than ever to combine ideas to innovate. Innovation occurs, the authors contend, not by inventing something new from scratch, but instead by combining existing ideas in a new way. It is contended that the best way to encourage innovation is to increase the human capacity to test new ideas, this is the same approach which is being implemented in our current proposal about AI coming up with new cases with existing data base of cases. Lawyers should always be alert to the new opportunities which the AI will enable. In future most legal professionals will be working much closer with AI, if it isn't true already. With the future and uncertain times ahead of us its most likely that a lawyer will be valued and recommended on basis of how well they are equipped to contend the new emerging challenges every other day.