



# Emerging and Future Technology for Effective Judicial Governance<sub>(Session-5)</sub>

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JUSTICE A. MUHAMED MUSTAQUE

# Two Big Elements In Justice Delivery System

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Block Chain &  
Artificial Intelligence(AI)



## How Does a Blockchain Work: A Step-by-Step View



**1** A user requests for a transaction



**2** A block representing the transaction is created



**3** The block is broadcasted to all the nodes of the network



**4** All the nodes validate the block and the transaction



**5** The block is added to the chain



**6** The transaction gets verified and executed

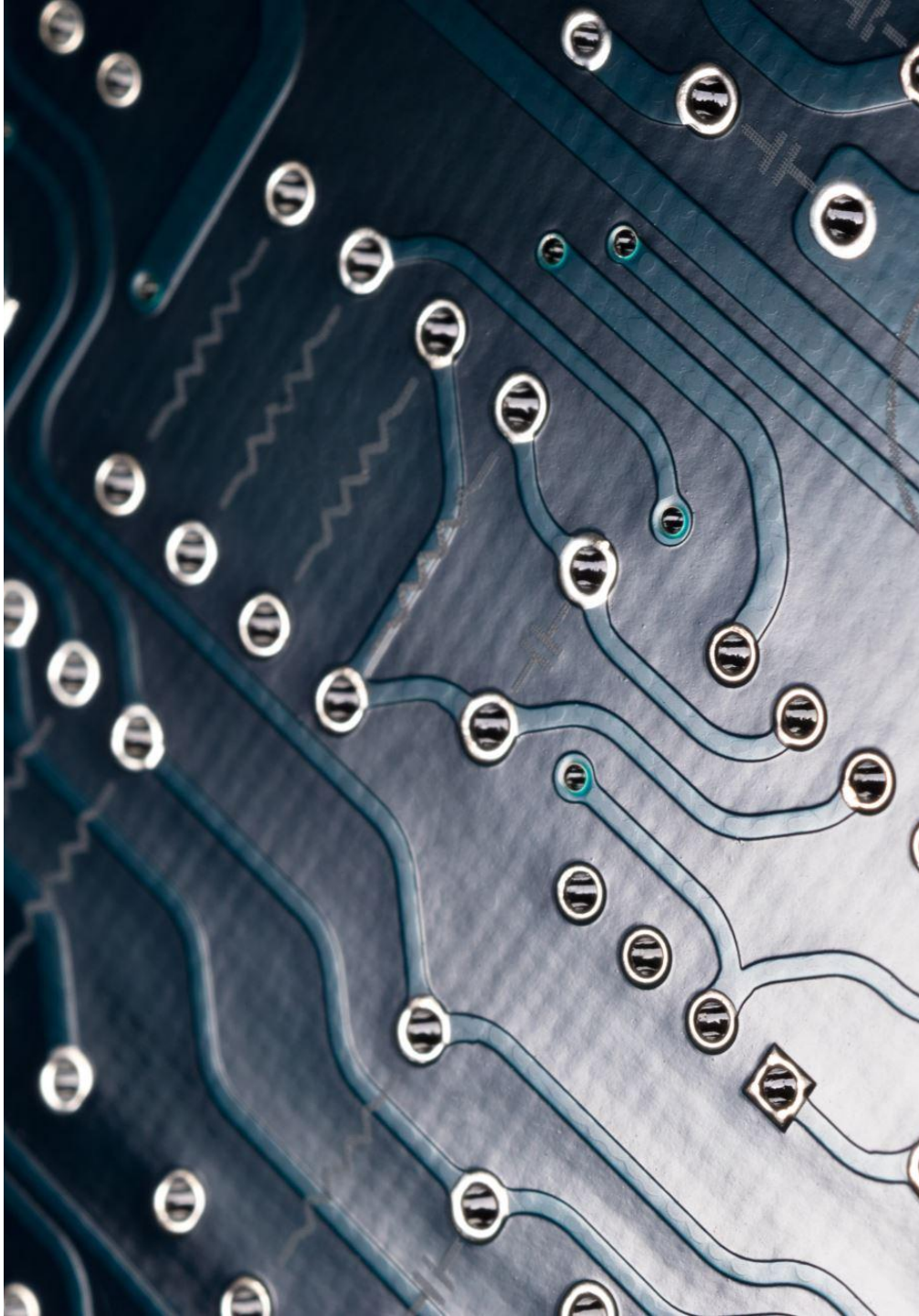


# How Blockchain Helps Safe & Secure Transmission

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- Record Keeping
- Chain of Custody
- Identity Verification
- Transparency and Trust among stakeholders





# Concept of Artificial Intelligence

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Artificial intelligence is a set of algorithms and intelligence to substitute human intelligence



# Why AI in Judiciary?

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- Choice of institutional norms in preference to individual choices
- Functional Credibility through consistency
- Certainty
- Expediency





# Potentials of AI in Justice Delivery System

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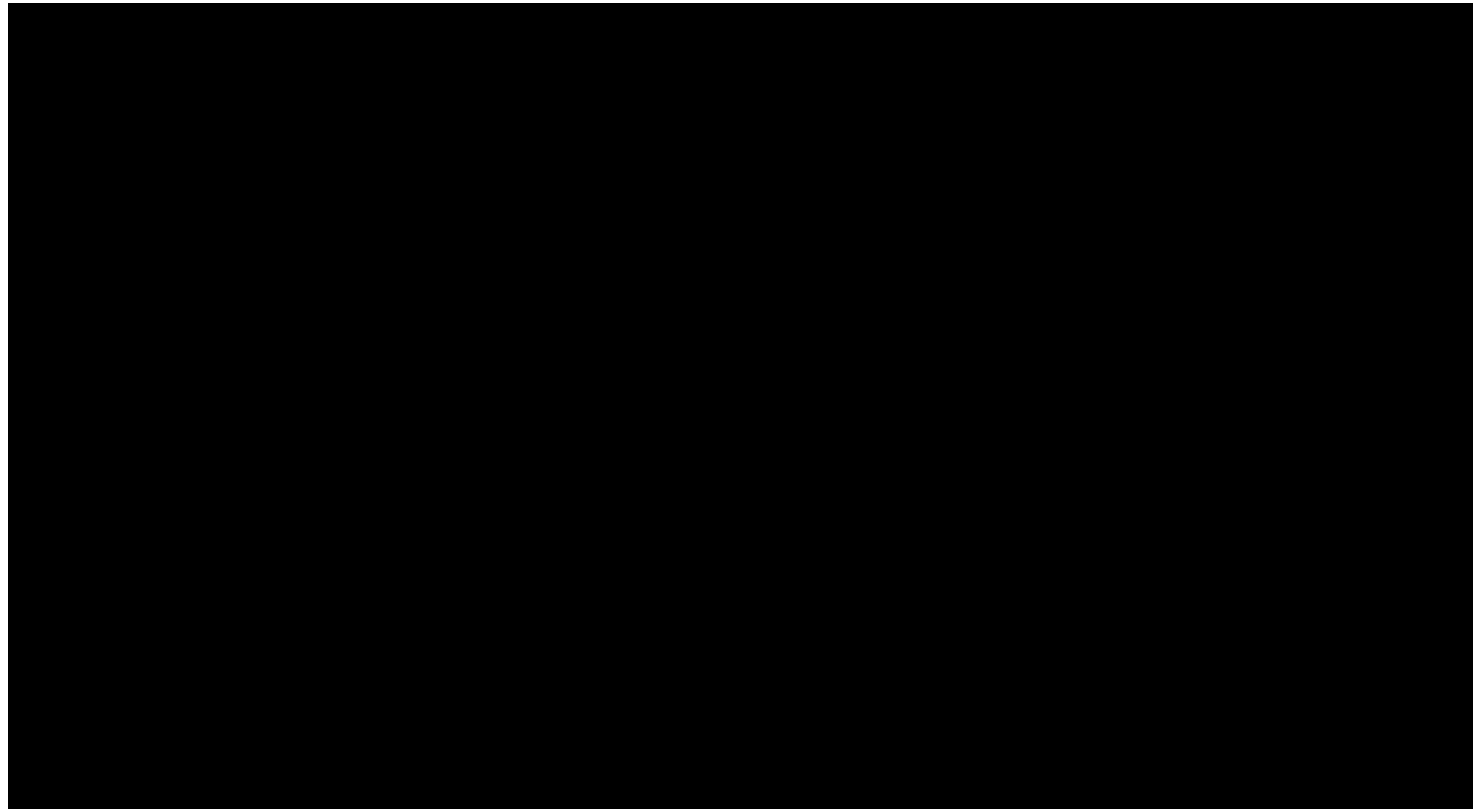
- Automation of court process( Filing, Scrutiny, Listing,etc)
- Machine Learning(ML)
- Natural Language Processing (NLP)
- Robotics





# AI induced Cyber Court in China

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# AI Tools

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## Transcription

- Real Time Voice to Text(NLP) models for recording witnesses' depositions/court proceedings(Eg: TERES in SC)



# AI Tools

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ChatGpt/BARD etc.,

- provide real-time assistance to the stakeholders for all their requirements related to the service delivery through integration with the existing solutions.
- ❖ High Court of Kerala has already integrated it's CMS with ChatGpt services, and customising it for the services is in progress

[https://ecourts.kerala.gov.in/judge\\_display/chatgpt](https://ecourts.kerala.gov.in/judge_display/chatgpt)

# QuillBot

<https://www.youtube.com/watch?v=tbnUqvXsCWs>

## AI Tools

- An online paraphrasing tool (a reword generator) is a tool that allows you to find better ways to reword or paraphrase your content. This paraphrasing tool can be used to enhance the quality of writing and be able to communicate textual content in clear and meaningful ways.



# Facial Recognition- Machine Learning + AI

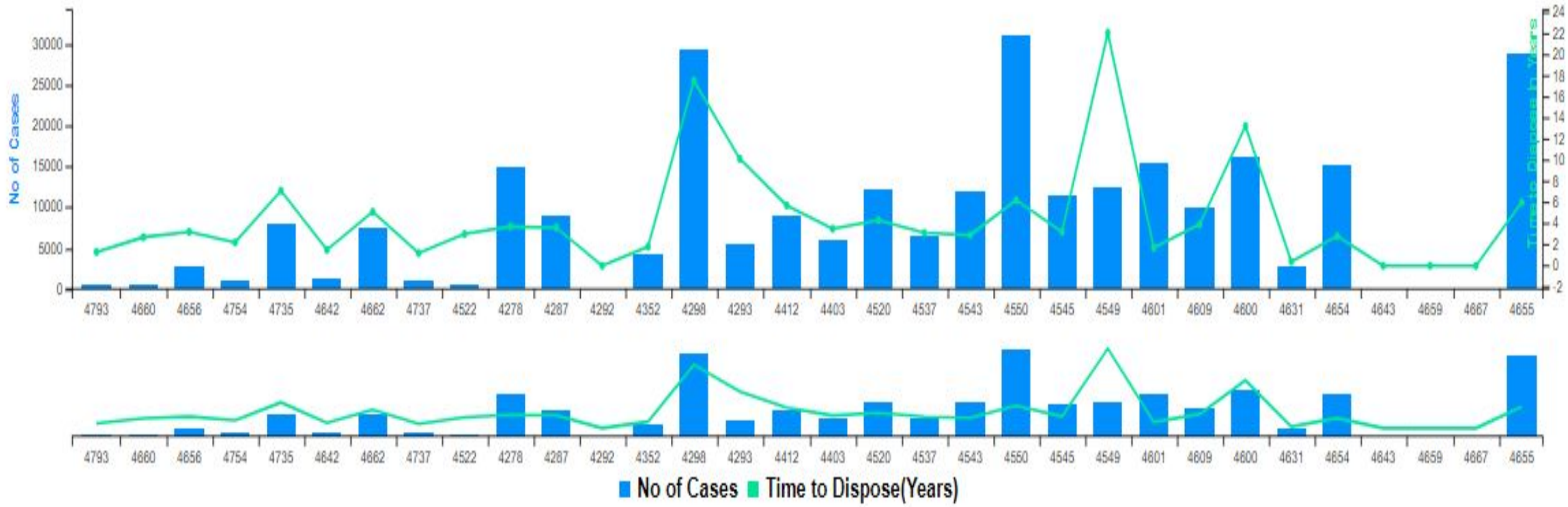
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‘Using machine learning and other deep learning techniques, computers can recognize faces with utmost accuracy. The facial detection and recognition system can verify a person from a digital image or a frame/clips of a video. Numeric codes called faceprints are used for detection along with identifying 80 nodal points (end to end measurements with respect to nose, jaws etc.) on the face.’

[Face Recognition Technology Intro](#)

[1:12](#)

# Roster Analysis



Roster

BenchName ▼

Case Type ▼

selected Roster

BenchName ▼

Case Type ▼





Thank You!

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