Smart Stadium – IBM Watson for Wimbledon – chatbot to increase fan satisfaction

Digital Deepfake presenters

Trends in sports tech market growth, sectors and sports

AI driven video content for targeted audiences

NFL prevent injuries of brain- coaches tracking players to monitor performance

Coaching tracking systems

Automatic highlights – ex: NBA

Technology in sports –

Off field and on field with examples

Then rapidly go over AI and New tech in this domain:

What do the NBA, the Australian Open, and FC Barcelona all have in common? Here's a look at how sports organizations are driving results and fan engagement with chatbot solutions

* Chatbots –
  + Sports teams are using virtual assistants to respond to fan inquiries across a wide range of topics including live game information, team stats and arena logistics.
  + Assisting ticket sales.
  + Increase fan engagement with real time responses during matches
  + Integrated with smart stadiums (equipped with IOT sensors) to respond to questions
    - Examples: Chatbot de IBM Watson pendant Wimbledon, Tennis Australia Messenger Chatbot pour Australia Open avec 25 fois retour sur investissement.
  + Analysis of fan engagement and demographics for tailored content suggestions. Ex: FC Barcelona chatbot
  + Points techniques : plus en plus accessible pour tout le monde avec les avancements dans le domaine du NLP. Existence de la nouvelle architecture des Réseaux Neurones et aussi bibliographies comme Rasa etc. Word embeddings and RNN of various type GRU, LSTM and Attention models.
* Computer Vision – Researchers are training deep learning neural networks to achieve accuracy beyond humans in the ability to quickly capture and comprehend various situations in sport from photos and videos.
  + Nascar image and car faults identification real time: to identify specific cars at high speeds which typically produce photographic images with reduced clarity
  + AI referee tennis
  + Video highlights + targeted video content based on audience
  + Digital presenters
  + Points techniques:
* Automated journalism – Media outlets are leveraging AI-driven automation to expand their sports coverage capabilities and increase revenue.
  + Example: Associated press covers 10k baseball matches with automation. Automated Insights company for clients like Associated Press. Washington Post Rio Olympics 2016 multiple articles on various topics at same time.
  + Points technique: Processing of Big data using traditional techniques Hadoop(Map reduce) along with Web scraping and Information retrieval and then Natural language generation. Example: LSTM to produce text directly from data by training. (one example is image captioning)
* Wearable tech and IOT– Companies are using AI in conjunction with IoT devices to gather data to attempt to optimize training and performance.
  + Along with cloud computing and analytics used by coaches to assess performance and health of their players.
  + <https://www2.deloitte.com/content/dam/Deloitte/us/Documents/consumer-business/us-cb-internet-of-things-sports.pdf> - good resource explaining details.
  + Points technique: BAN (Body area network) put image and explain. Then the data sent to cloud like AWS (NFL for ex) for treatment and results sent to dashboards of coaches/team doctors/managers. Three images for three steps with arrows on a slide

Many times, these technologies work in cohesion and not in isolation to improve and revolutionize the sports industry.

Slides organization:

Nouvelles Technologies (IA, Big Data, IOT et Analytics) dans le domaine du Sport :

Introduction : Une slide pour montrer l’avenir - croissance attendu dans 10 ans et les domaines

Contenu

Plusieurs sujets non traité – Analytics pour l’achat des joueurs, Betting et prédiction du gagnant etc.

Etude de veille – avec graph et screenshots des outiles utilisé.