Applied AI SPORT

01

03

05

09

04

06

08

10

WHY AI?

- Performance optimization
- Al-driven injury prevention
- · Fan engagement and experience
- Data analytics in talent scouting
- Automated sports content creation

STRATEGIC TRENDS

- Al in athlete performance monitoring
- Machine learning for injury prediction
- · Data analytics in scouting and recruitment
- Al-driven fan experience enhancements
- Wearable tech for fitness and health
- Virtual reality in athlete training
- Al in game strategy and analysis
- · Real-time analytics in sports broadcasting
- Social media interaction with Al
- Sustainable practices in sports operations

LEADING COMPANIES

- FIFA (International football/soccer association)
- NBA (National Basketball Association)
- NFL (National Football League)
- IOC (International Olympic Committee)
- Adidas (Sports apparel and equipment)

AI DISRUPTION

- · Personalized training programs with Al insights
- · Real-time injury risk assessment using Al
- Enhanced fan engagement with Al-driven platforms
- · Al in optimizing team strategies and tactics
- Automated sports journalism and content creation
- Al tools in sports event management
- Machine learning for sports marketing insights
- Al in sports equipment design and innovation
- Data analytics for athlete health and wellness
- Al-driven insights in sports broadcasting

ECOSYSTEM REQUIREMENTS

- Cutting-edge Al and machine learning technology
- Collaboration btw/ sports organizations and tech companies
- Skilled workforce in sports science, Al, and data analytics
- · Ethical guidelines for Al use in athlete data handling
- Infrastructure for data collection and fan engagement

1NDUSTRY

- Athlete Performance Analysis
- Sports Team Management
- · Fan Engagement and Marketing
- Sports Event Management
- Sports Equipment and Apparel

WHY CHANGE?

- Enhanced athletic performance
- Reduced injury risks
- Engaging fan experiences
- Efficient team management
- · Advanced training techniques

ENABLING TECHNOLOGIES

- Wearable devices for health and performance tracking
- Al algorithms for game strategy analysis
- Machine learning in player performance data
- Chatbots for fan interaction and support
- · Data-driven marketing and fan engagement
- Al in sports content generation
- Predictive analytics for talent identification
- Virtual reality for immersive fan experiences
- IoT in sports facility management
- · Al tools for coaching and training

GREAT EXAMPLES OF AI

- FIFA's AI in game analytics and fan engagement
- · NBA's use of Al for player performance and scouting
- NFL's Al tools for injury prevention and game analysis
- · Adidas's Al in product design and customer experience
- Hawk-Eye technology in tennis and cricket
- IBM Watson's Al in sports analytics
- · Catapult Sports' Al for athlete monitoring
- · Strava's Al in community building and fitness tracking
- STATS Perform's Al in sports data and analytics
- WHOOP's wearable Al for athlete performance

NEW RISKS

- Al biases in athlete performance analysis
- Privacy concerns in personal health data
- Over-reliance on technology in sports decisions
- Ethical challenges in Al-driven fan data use
- · Cybersecurity risks in sports data systems

MISUSE

- Misuse of Al in performance-enhancing strategies
- Unauthorized access to athlete data
- · Al biases affecting team selection
- Over-automation impacting the spirit of sports
- Al in promoting unfair competitive advantages

ORG. REQUIREMENTS

- · Strategic Al adoption in sports operations
- · Ethical standards for Al in sports
- Training in Al, sports analytics, and health data
- · Focus on fan engagement and athlete welfare
- Continuous assessment of Al impact in sports

BEST PRACTICES

- · Ethical and transparent Al use in sports
- Al as a tool to enhance performance and safety
- Focus on Al for engaging and interactive fan experiences
- · Innovate responsibly with Al in sports
- Adapt Al strategies to evolving sports technology trends

DIGITAL TWINS

- Digital twins of sports arenas for event management
- Virtual models for athlete performance scenarios
- Al simulations for game strategy and planning
- · Digital replicas of sports equipment for testing
- · Virtual reality training environments for athletes

FUTURE JOBS

- Al specialists in sports performance
- · Data analysts for athlete health and fitness
- Machine learning experts in game strategy
- Ethical Al advisors in sports teams
- Al-driven fan experience designers

RECOMMENDED READING

- Sport 2.0 (Miah) Digital sports transformation.
- Performance Cortex (Schonbrun) Athlete neuroscience.
- Moneyball (Lewis) Baseball sabermetrics.
- Sports Gene (Epstein) Athletic genetics.
- Game Changer (Fouché) Sports tech revolution.

ONLINE RESOURCES

- ESPN: Sports news and analysis.
- Sports Illustrated: Sports news, stories, and videos.
- The Athletic: In-depth sports news and narratives.
- Bleacher Report: Sports highlights and articles.
- Sky Sports: Sports coverage and live updates.



Applied AI

DILEMMAS

- · Balancing Al insights with traditional coaching?
- Ethical use of Al in athlete health monitoring?
- Al's impact on the authenticity of sports competition?

NP 07.40

STEP BY STEP AI

· Identify Al applications in sports

12

14

16

18

20

22

24

13

15

17

19

21

23

- Implement AI for performance, health, and fan engagement
- Train sports professionals in Al technology and ethics
- Integrate Al in coaching, management, and marketing
- Eval. Al impact on sports performance and fan experience

AI MODELS

- Predictive analytics for performance and injury
- Al algorithms for game strategy and tactics
- · Machine learning in talent scouting
- Data analytics for fan behavior and preferences
- Neural networks for sports equipment innovation

GLOBAL LEADERS

- US: Sports technology leader.
- UK: Sports analytics and fan engagement.
- Germany: Sports performance and health tech.
- China: Al-driven sports growth.
- Australia: Sports science and tech innovation.

THE FUTURE OF AI

- Core integration of Al in sports training and performance
- · Al-driven innovations in sports health and safety
- Personalized fan experiences with Al technology
- Enhanced game strategies using Al tools
- Ethical Al shaping the future of sports competitions

TED TALKS

- "The math in basketball's wildest moves" (Maheswaran)
- "The science of cells that never get old" (Blackburn)
- "Why we need to imagine different futures" (Jain)
- "How Al is changing sports" (Alagappan)
- I TOW AT IS CHANGING SPOTES (Alagappan)
- "The secret to winning in ping pong and life" (lyer)

NEXT STEPS

- Engage with Al technology.
- Identify opportunities for Al application.
- · Invest in Al education and training.
- Please contact us at hello@nextpaper.me for further exploration or inspiration through a n Al-related talk, workshop or consulting. We'd love to help!

SPORT