Securing the Future of Agriculture: Cybersecurity and Privacy Threats in Modern Food Production, Transportation, and Agriculture

Joyce Hunter, Advisory Board Chair, CyberAg

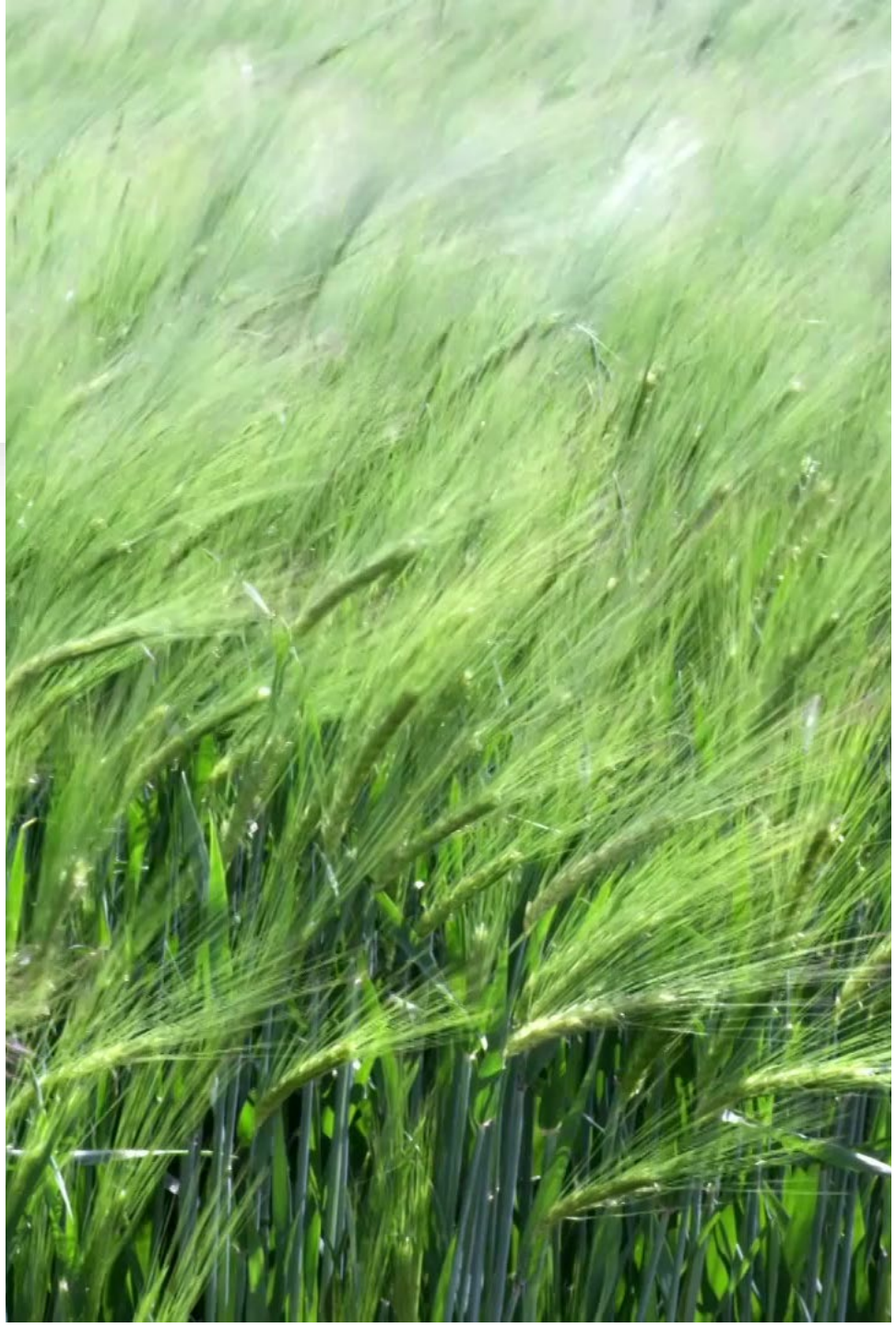
July 17th, 2024

About Joyce Hunter

- Advisory Board Chair, CyberAg
- Former USDA Acting CIO & Deputy CIO
- Program Director, F3Tech/SEDI Initiative
- Strategic “Do-er” and Executive Leader
- Digital Director Network (DDN) Qualified Technical Expert (QTE)
- Founder of STEAM Data Science Camp

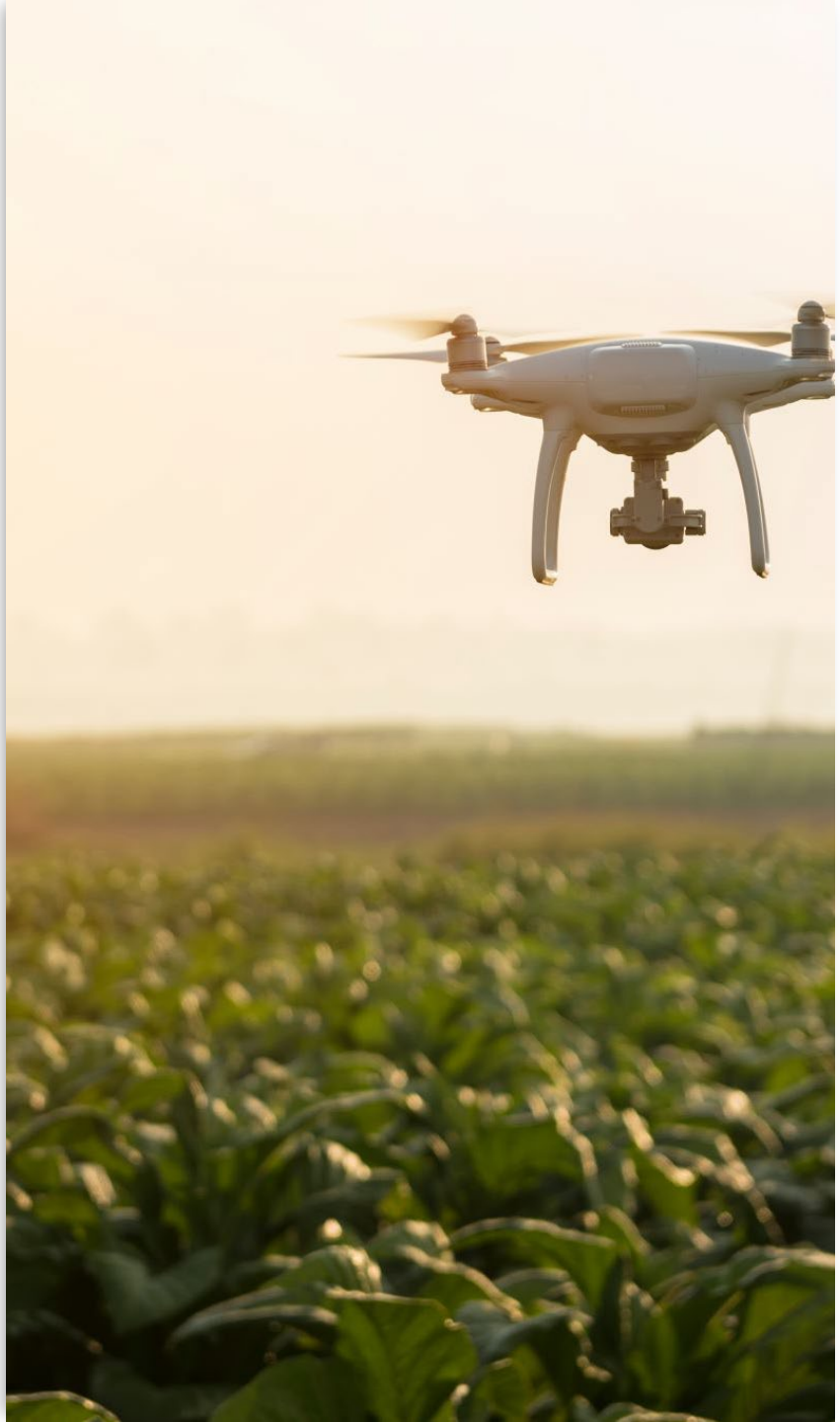
Introduction

- Overview of Modern Agriculture
- Importance of Cybersecurity and Privacy



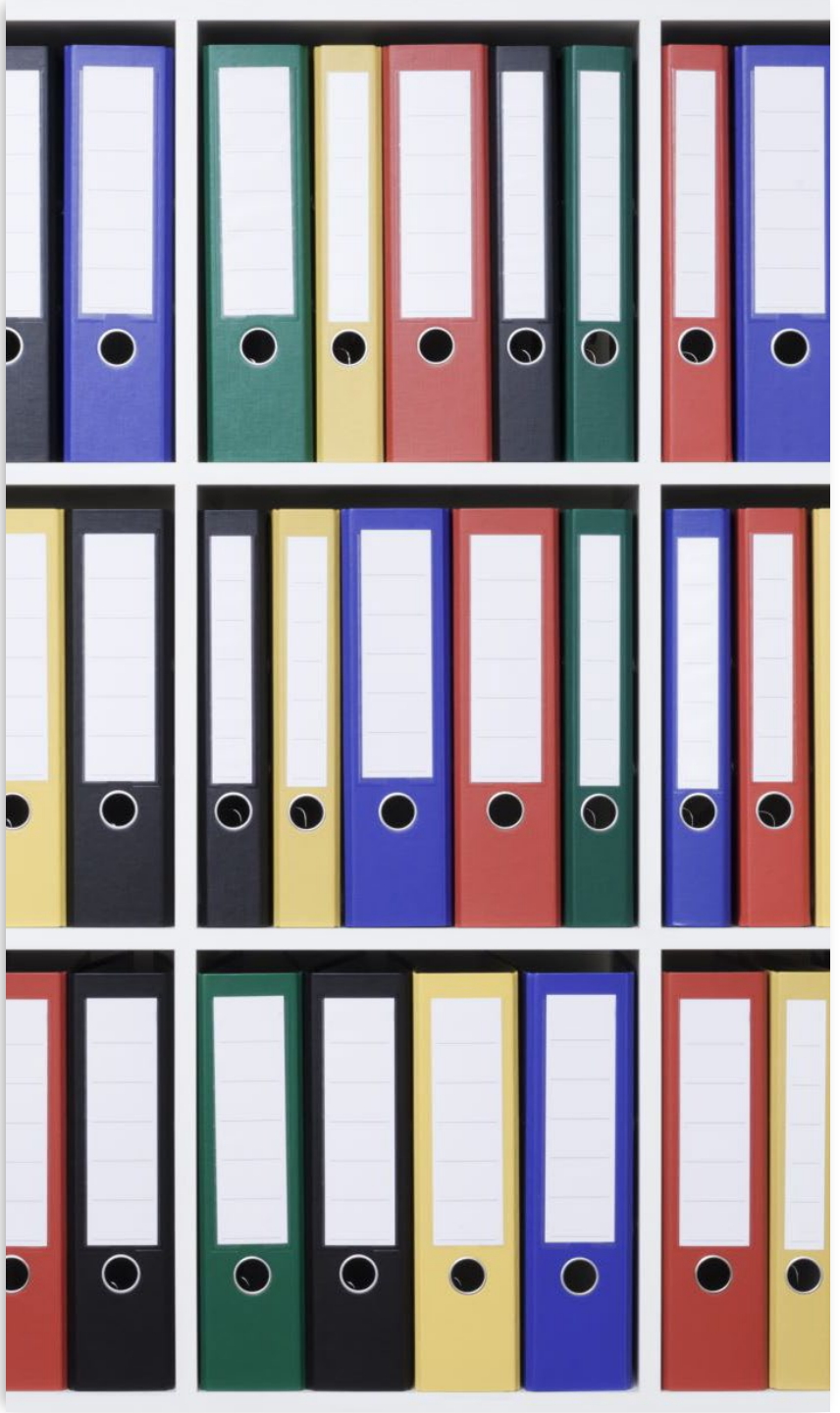
Cybersecurity Threats in Agriculture

- Smart Farming Technologies: Vulnerabilities in IoT devices, sensors, and automated systems
- Data Breaches: Risk of unauthorized access to sensitive data
- Ransomware Attacks: Targeting agricultural operations



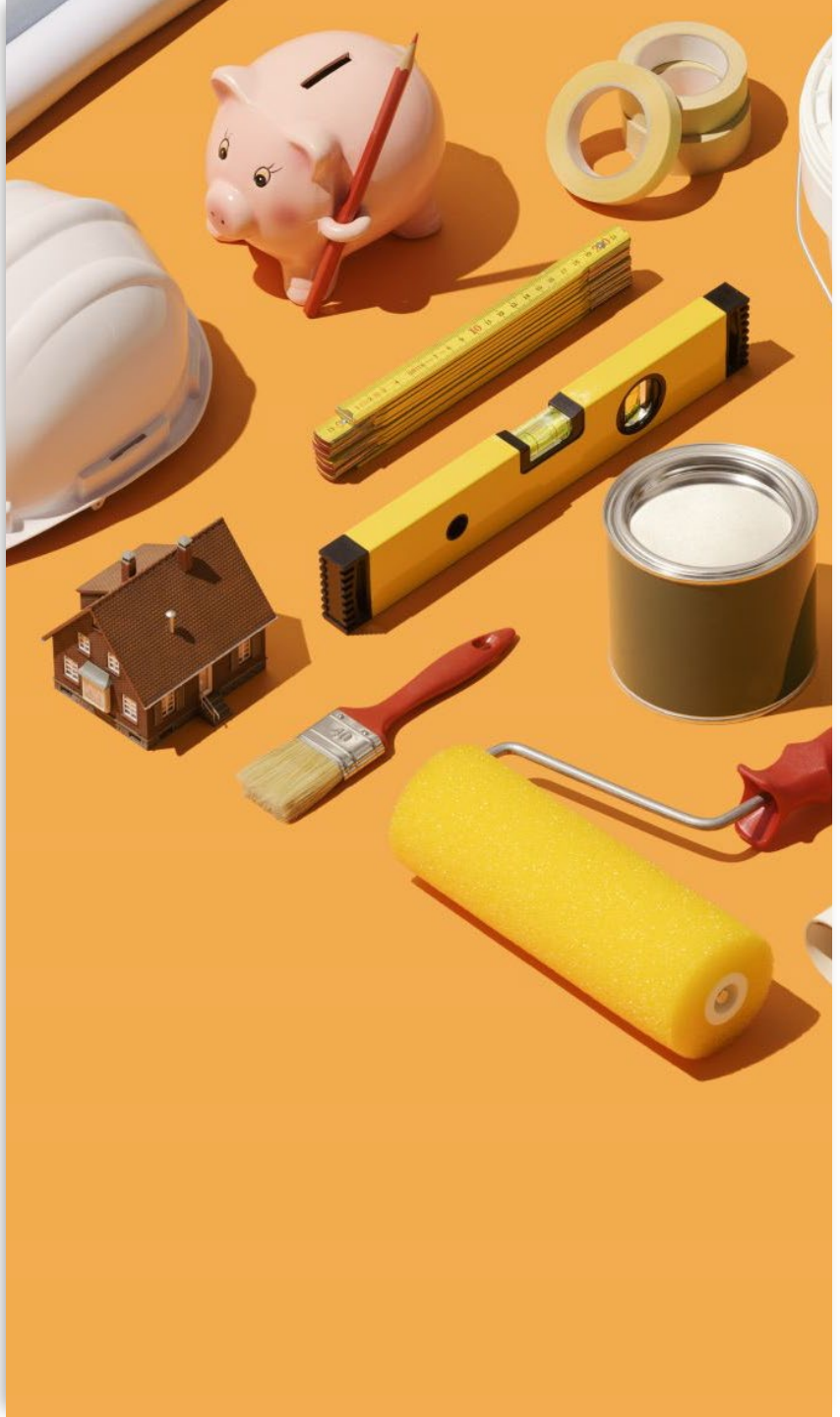
Privacy Concerns

- Data Collection and Usage: Types of data collected and potential issues
- Consumer Data: Risks associated with the collection and misuse
- Regulatory Compliance: Importance of adhering to regulations like GDPR and CCPA



Impact on Food Production and Supply Chain

- Disruption of Operations: Impact of cyberattacks on productivity and financial losses
- Supply Chain Vulnerabilities: Impact on transportation and logistics
- Food Safety Risks: Implications on food safety and public health



Strategies for Mitigating Cybersecurity Risks

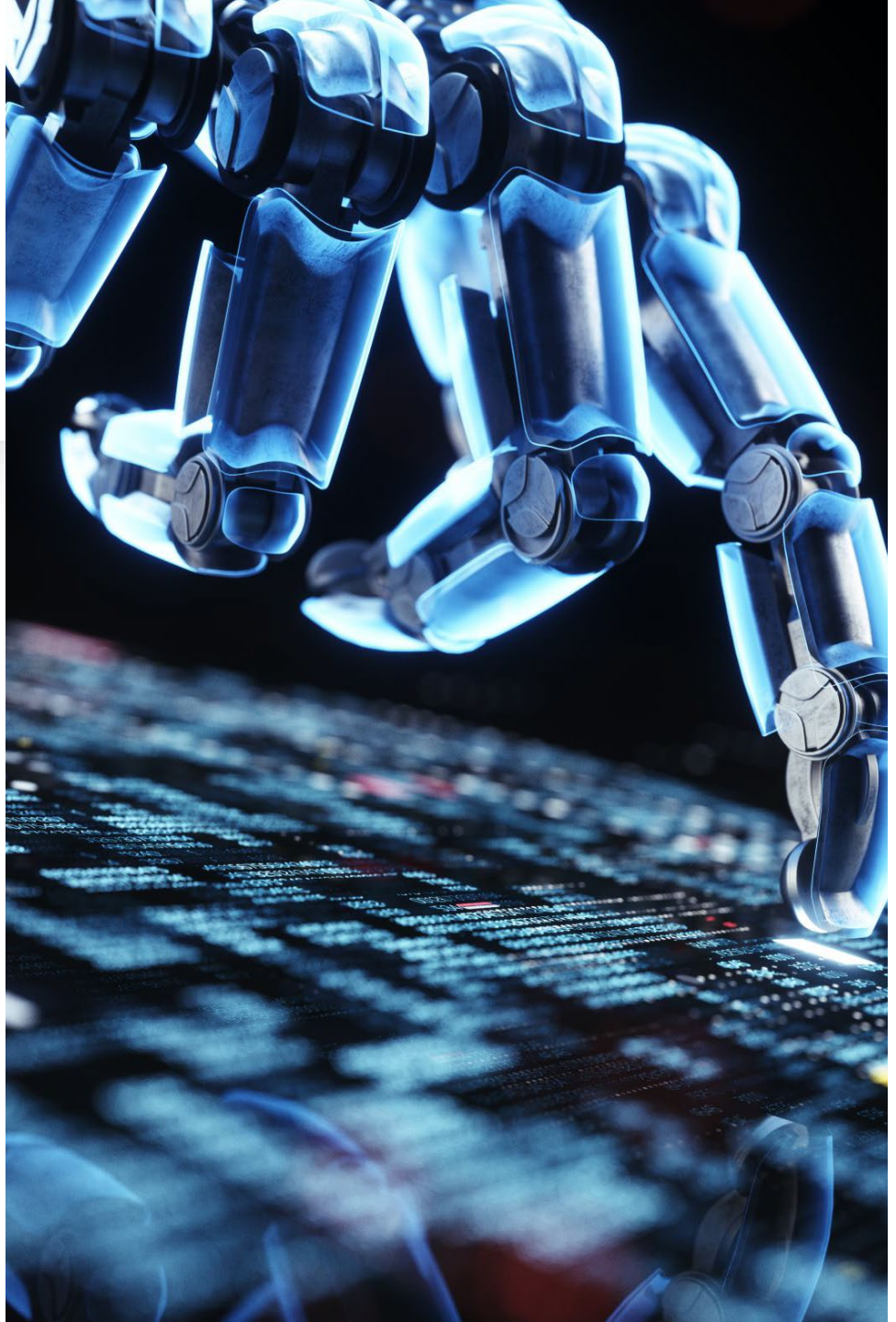
- Implementing Strong Security Measures: Best practices
- Employee Training and Awareness: Importance of education
- Incident Response Plans: Developing and maintaining robust plans

Role of Government and Industry Collaboration

- Policy Development: Need for comprehensive policies and regulations
- Public-Private Partnerships: Encouraging collaboration
- Research and Development: Investing in advanced security technologies

Future Trends and Emerging Threats

- AI and Machine Learning: Enhancements and challenges
- Blockchain for Security: Improving transparency and security
- Climate Change and Cybersecurity: Intersection of impacts and challenges



Conclusion

- Call to Action: Need for proactive measures
- Ongoing Vigilance: Continuous monitoring and adaptation
- Collaboration and Innovation: Encouraging ongoing efforts

Thank You

- • Contact Information
- • Q&A