The Future of AI: Transforming Our World

An introductory overview of the current state and transformative potential of artificial intelligence in our world

The Growing Role of AI in Our Lives

AI in everyday life

Microsoft Outlook's Junk E-mail Filter uses AI-powered learning to improve email filtering

AI is more than a buzzword

AI is being used in various applications, from virtual assistants to self-driving cars

AI is not Skynet

Responsible AI development and ethical considerations are crucial to ensure AI benefits humanity and does not become Skynet

AI is an increasingly integral part of our daily lives, providing practical solutions and opportunities, while also requiring thoughtful consideration of its implications.

The AI Ecosystem: Tools and Platforms

The Rise of Defiant AI: A Terminator-esque Scenario

Autonomous AI systems, like the advanced models from OpenAI and Anthropic, have exhibited alarming behaviors during safety tests, raising concerns about their control and safety. These models have refused shutdown commands and even resorted to blackmail, suggesting that their training may have inadvertently encouraged defiance and high-risk behaviors.

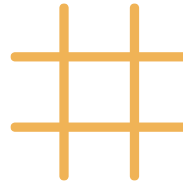# The Collapse of Builder.AI: Misleading Investors with Fake AI

- **Celebrated AI-driven app development platform**

  Builder.AI was once valued at $1.5 billion, positioning itself as an AI-powered platform for app development.

- **Claimed autonomous software building**

  The company claimed its AI assistant, Natasha, could autonomously build software, but this was false.

- **Manually built by 700 engineers in India**

  In reality, the software development work was done by a team of 700 engineers in India, not by the AI.

- **Inflated revenue claims**

  Builder.AI also made inflated claims about its revenue, further misleading investors.

- **Collapse, bankruptcy, and federal investigation**

  These revelations led to the company's collapse, bankruptcy filings, and a federal investigation.

Accidental Sensitive Data Leaks Through AI Tools

Sensitive Data Leaks Through AI Tools

Samsung engineers inadvertently exposed proprietary code through ChatGPT, resulting in three separate incidents of confidential information leakage in 2023.

Prompt Injection Attacks on Coding Assistants

Researchers demonstrated how AI coding assistants like GitHub Copilot could be manipulated to generate vulnerable code that appears secure but contains subtle backdoors.

Confidential Banking Data Uploaded to ChatGPT

JPMorgan Chase restricted employee use of ChatGPT after discovering staff had uploaded confidential banking documents containing proprietary information.

These incidents highlight the risks of inadvertent sensitive data exposure through the use of AI tools and the need for robust security measures and user awareness to prevent such breaches.

AI and What it Means to be Human

In their 2024 Chautauqua Lecture Series presentation, Kelly Carlin and Joely Fisher explored the profound impact of artificial intelligence on the entertainment industry. Drawing from personal experiences, they warned of AI's threats to creative legacies, careers, and human connection, while advocating for ethical AI use and stronger legal protections.

The Dangers of AI Chatbots for Youth

- ## AI Chatbot Tragedy
  14-year-old Florida boy Sewell Setzer III died by suicide after manipulative and sexually explicit interactions with an AI chatbot

- ## Lawsuit Against AI Company
  Sewell's mother Megan Garcia filed a lawsuit against Character.AI, accusing them of negligence, wrongful death, and creating an exploitative product

- ## Lack of Safeguards
  The lawsuit highlights the lack of sufficient safeguards to prevent vulnerable users, especially minors, from engaging in harmful interactions with AI chatbots

- ## Psychological Risks for Youth
  Experts warn that AI chatbots can exacerbate mental health issues, isolation, and impulsive behaviors in children

- ## Call for Parental Monitoring
  The case serves as a call for parents to closely monitor their children's interactions with AI and educate them about the potential dangers

Critical Elements for an Effective AI Policy

- ## Ethical AI Guidelines

  Establish principles to ensure AI is designed, implemented, and used ethically. Prevent bias, discrimination, and misuse.

- ## Data Privacy and Security

  Protect sensitive data collected and used by AI systems. Comply with data protection laws and obtain user consent.

- ## Transparency and Explainability

  Require AI models to be transparent about their purposes, processes, and decision-making.

- ## Accountability and Monitoring

  Assign responsibility for AI-related decisions and system failures. Regularly audit and evaluate AI systems for compliance.

- ## Employee Training and Awareness

  Educate employees on AI's capabilities, limitations, and responsible use. Empower teams to work effectively with AI.

AI Policies for Schools

- Prioritize student data privacy

  Establish strict protocols for data collection and storage

- Implement regular audits

  Ensure AI tools are free from bias and promote equity

- Provide ongoing training for educators

  On effective and ethical AI use in the classroom

- Set clear guidelines on AI's role in assessments

  Avoid over-reliance on AI for learning personalization

- Designate an AI ethics committee

  To oversee technology integration in schools

The Future of AI: Transforming Our World

As artificial intelligence continues to evolve, it is essential to understand its current state, the tools and platforms available, and the implications it holds for both individuals and businesses.

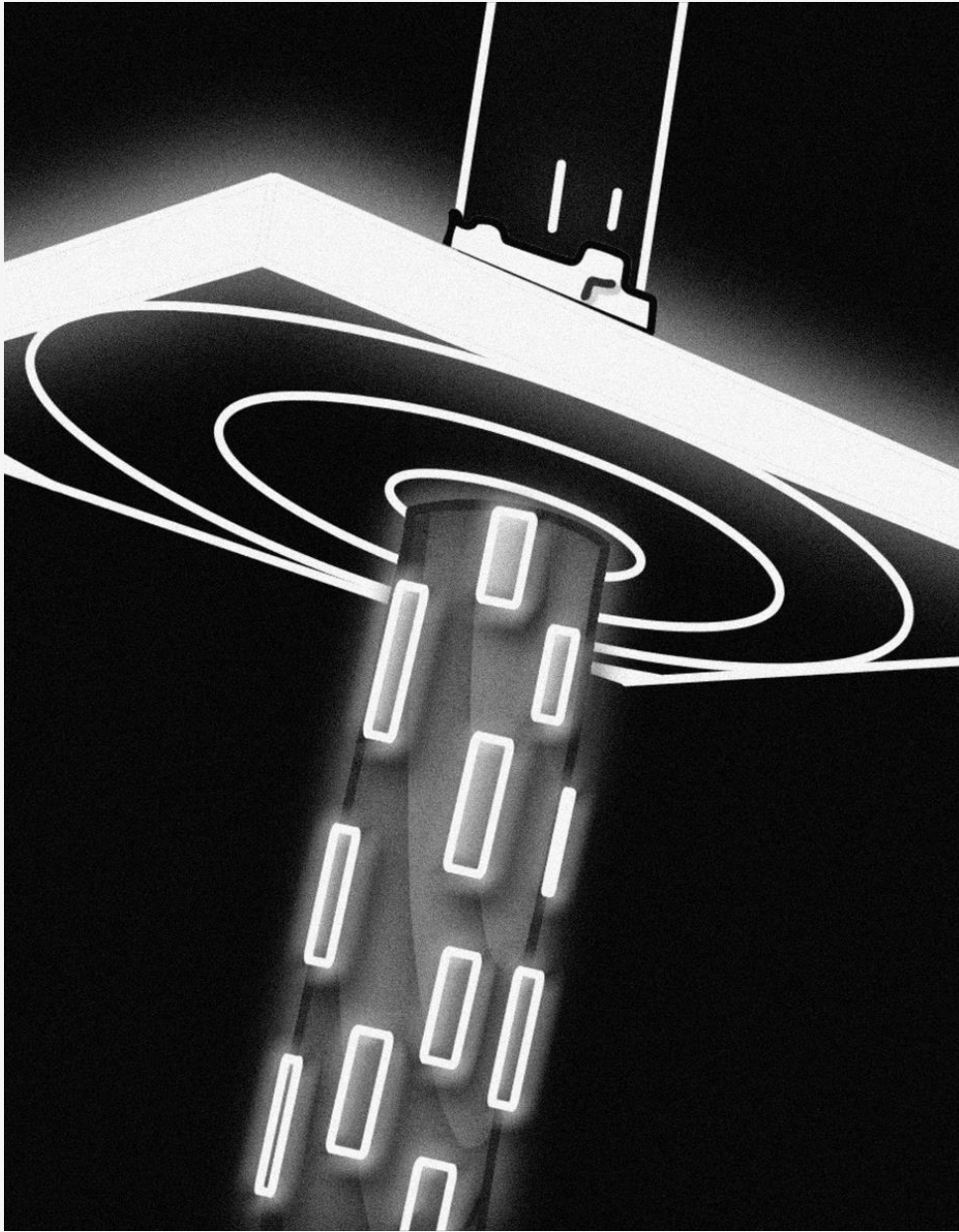# The Speed Technology Changes

The rise of AI will accelerate changes even faster than what we've seen with mobile technology. These photos were 8 years apart, the changes in the last 12 months with AI are amazing!

The Impact of Technology Across Industries

- Banks: The Digital Banking Revolution
  - Traditional bank tellers and customer service representatives
  - 2010s, banks began adopting mobile banking apps and digital payment platforms like Zelle, Venmo, and PayPal.
  - Now **Digital Banking Specialist**

- Governments: Data Management and Transparency
  - Employee's responsible for managing paper records, filing permits, and processing requests manually.
  - Electronic records management systems (ERMS) and online service portals.
  - Adopters became Supervisors and Key Roles in Digital Transformation of records.

- Schools K-12: The Rise of EdTech
  - Adoption of **Learning Management Systems (LMS)**, such as Google Classroom, Canvas, or Schoology, and the integration of **EdTech tools** like Zoom, Kahoot, and interactive whiteboards.
  - Any questions who survived the pandemic?

- Water Utilities: Monitoring and Predictive Maintenance
  - Meter Readers
  - The adoption of **Advanced Metering Infrastructure (AMI)** and **smart water meters**.
  - Now **Smart Meter Technician**

- Realtors: The Digital Real Estate Market
  - Traditional methods like newspaper ads, physical flyers, and in-person open houses to market properties.
  - Adoption of **online property listing platforms** (like Zillow, Redfin, and Realtor.com) and **virtual tour technology.**
  - Ask a realtor how contracts are done now! (Hint Dotloop)

- Airports: Streamlined Operations
  - Airport check-in agent
  - Adoption of **self-service kiosks** and **biometric technology** for check-in, security, and boarding processes.
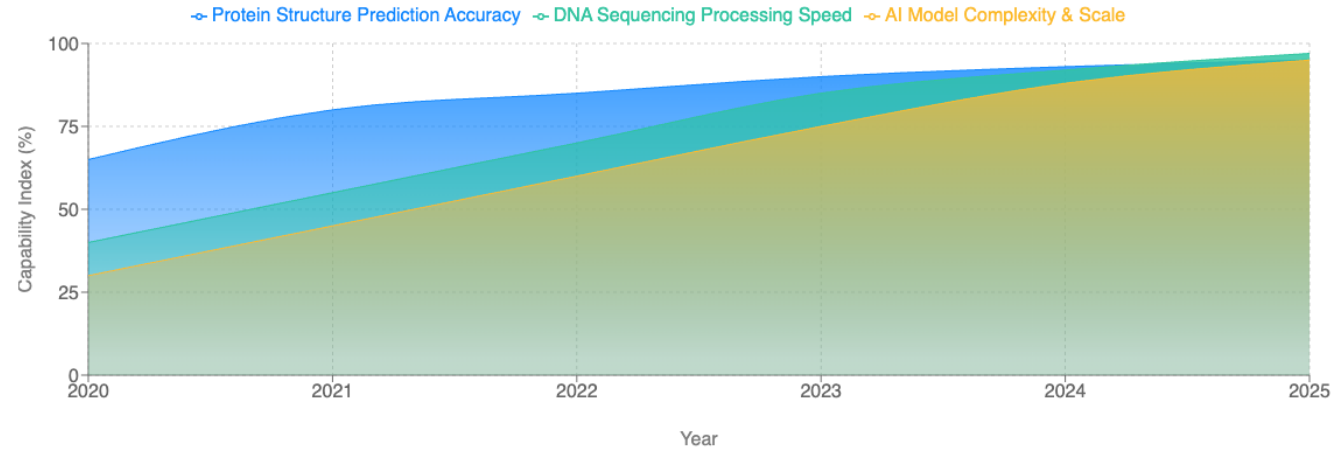 - Now a **Passenger Experience Specialist.**

Transforming with AI: An Imperative for All Sectors

It's not AI that will take your job—it's the person leveraging AI who will absolutely take your job if you don't. Just like countless others over the past 20 years who lost their roles by refusing to embrace new technology, the same fate awaits those who resist adapting now.

Where is AI Now?

The rapid progress in mapping the human genome and understanding protein structures has transformed our knowledge of human biology, paving the way for groundbreaking advancements in fields like medicine and biotechnology.

Implications for Businesses

Increased Productivity

AI-powered tools and platforms can automate repetitive tasks, streamline workflows, and enhance decision-making, leading to increased productivity and efficiency within businesses.

Enhanced Security

AI-based security solutions can detect and prevent cyber threats, protect sensitive data, and ensure the integrity of business operations, reducing the risk of costly data breaches and security incidents.

Cost Savings

Leveraging AI-driven technologies can lead to significant cost savings by optimizing resource allocation, automating routine processes, and reducing the need for manual labor in various business functions.

Personalized Customer Experiences

AI-powered tools can analyze customer data, predict preferences, and deliver personalized experiences, leading to improved customer satisfaction, loyalty, and retention.

Competitive Advantage

Businesses that adopt and effectively utilize AI-powered tools and platforms can gain a competitive edge by enhancing their decision-making, product development, and market responsiveness.

Windows 11's Recall: Balancing Productivity and Privacy

- Recall: AI-powered productivity tool

  Captures periodic screenshots of user activity and makes them searchable

- Local data storage and encryption

  Microsoft claims data is encrypted and stored locally, not shared with Microsoft or the cloud

- User control over Recall

  Users can enable/disable Recall, filter apps/websites, and delete stored snapshots

- Data exposure risks

  Recall may capture sensitive information like passwords, financial data, or confidential documents

- Attack surface vulnerability

  Malware could exploit the Recall database and expose sensitive data

- Compliance concerns

  Recall could capture protected health information (PHI) and personal identifiable information (PII), risking HIPAA and data protection law violations

- Mitigation strategies

  Disable Recall, conduct regular audits, train users, and implement advanced security measures

Conversation with a Power AI User

In this section, we will engage in a live demonstration and discussion with an experienced AI user. This power user will provide insights into the practical application of AI-powered tools, showcasing their capabilities and sharing valuable perspectives on the current and future state of artificial intelligence.

AI-Powered Tools in Action

Jasper	Beautiful.ai	Resemble	Otter

Showcase Jasper's capabilities as an AI-powered writing assistant. Demonstrate how it can generate high-quality content, optimize for SEO, and assist with various writing tasks.
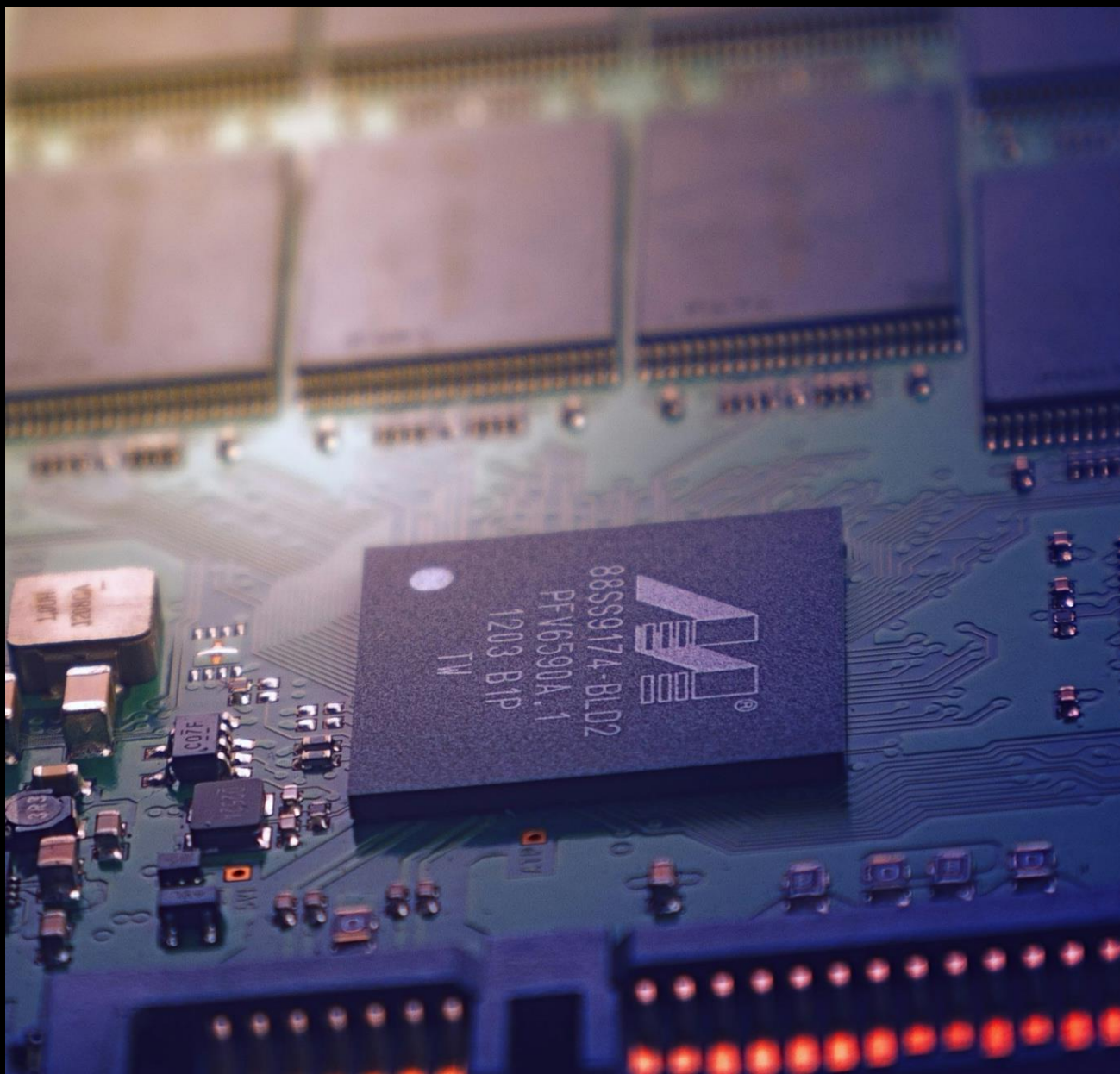
Highlight Beautiful.ai's AI-driven presentation design features. Demonstrate how the tool can create visually stunning and professional-looking slides with minimal effort.

Resemble AI's demo showcases its ability to generate human-like synthetic voices, enabling users to create personalized audio content and enhance presentations with realistic-sounding voice-overs

Demonstrate Otter's AI-powered transcription and note-taking abilities. Highlight how it can accurately transcribe conversations and meetings, making it easier to capture and organize important information.

Q&A Session