AUTOMATONS, AUTOMATION, & ANALYTICS

The Many Faces of AI
THE AI UNIVERSE  

BENEFITS

APPLICATIONS
THE AI UNIVERSE

• PUTTING THE ‘I’ IN AI . . . AND THE ‘A’
• (NOT (ALWAYS)) ROBOTS!
• BUT, OH, THE HUMANITY
The Big Picture

- Robotics
- Data Science
- Artificial Intelligence
- Machine Learning
- Deep Learning
- Natural Language Processing
**ROBOTS**

- Programmable machines
- Can perform a range of functions
  incl. autonomous decision making

**AUTOMATONS**

- Predecessors to modern robots
- Mechanical
- Predetermined set of instructions
MACHINE LEARNING

• Algorithms + Statistical models → Pattern discovery → Inference

• Deep Learning vs Task Based
  • Supervised: data with labels, like learning with flashcards
  • Unsupervised: no labels, data is fed in and broken down into features, patterns found
  • Neural networks
MACHINE LEARNING
HUMAN JOB SECURITY

- Reasoning
- Client relationships
- Understanding outliers and context
A FINAL WARNING

• Automation ≠ Automatons ≠ Robots ≠ AI

• Take care in selling AI
  • Some may see it as positive; “Robots are doing that?!”
  • Some may see it as negative; “I’ve seen that Will Smith film . . . I don’t trust robots”
  • Don’t oversell and definitely don’t underdeliver
BENEFITS

• Consistency
• Error Reduction
• Troubleshooting
• Efficiency
• Reputation
• Profitability
PICNIC

• Data entry

• Convoluted processes lead to confusion and frustration

• Computers don’t get tired, have bad hair days, or get distracted by funny GIFs
REPUTATION IS FOR LIFE*

• Data driven decision making
• Building a modern brand
• Lead by example, be knowledge leaders
• Use tech-hype to establish trust

*take note, Love Islanders
TIME IS MONEY

• Companies and individuals

• Automation → Speed and efficiency

• Increase profits by using less resource time; resources then used to bring in more revenue
BIG DATA APPLICATIONS

- Taste Recommendations
- I’m Not a Robot
- Augmented Reality
COMPLETELY AUTOMATED TURING TEST

- Humans vs Computers

1. Move your mouse
2. Click on the cats
3. Train Google’s keyword search algorithm
GOTTA CATCH ‘EM ALL!

- ML used to parse a live scene
- Occlusion techniques used to embed AR characters
MEDIA APPLICATIONS

- Opinion Mining
- Creative Enterprises
- Delivered Value
- Content Engagement
MIND THE GAP

• RADAR (Reporters and Data and Robots) 😶
  • Automated news service from Press Association and Urbs Media
  • Filling gap in news coverage with data-driven content
  • Fed data from sources in government, public services, local authorities, and templates written by reporters

• Forbes’ Bertie
  • Helps reporters choose content, titles, and images
BEAUTY IS IN THE EYE OF THE CONSUMER

• JCDecaux Finland partnership with startup Visualmind
• Advanced image recognition software used to analyse adverts
• DB created with thousands of pictures
• Panels of consumers are exposed to the images and their thoughts and feelings recorded
• ML tool compares new images to learned material

Image: visualmind.io
TELL US WHAT WE WANT TO HEAR

• Radio networks around the world now using ML to tap into mountains of data

• On-demand and voice activation; engaging content and advertising

• Instreamatic

  • Dialogue advertising

  • Builds a conversation, opens product page in browser if user engages
SEE IT, SAY IT, SORTED

• Comcast/Online media and entertainment providers
  • Targeted advertising grows with recommendation technology
  • Consumers identifying what they want to see and when (adverts and content)
• Audience behaviour and the creative process changing with interactivity
  • ML adapts instantly
MAJOR PLAYERS ARE ALREADY USING AI PROJECTS; DON'T GET LEFT BEHIND.

AI CAN REAP MANY BENEFITS FOR ALL INDUSTRY STAKEHOLDERS.

AI DOES NOT MEAN ROBOTS.
THANK YOU!