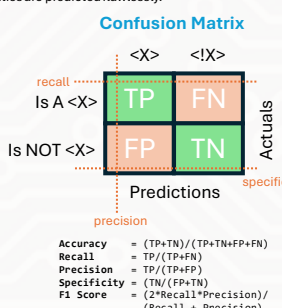
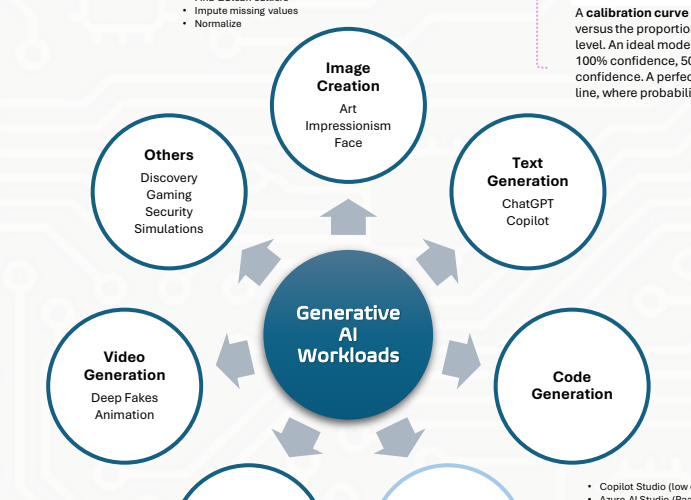
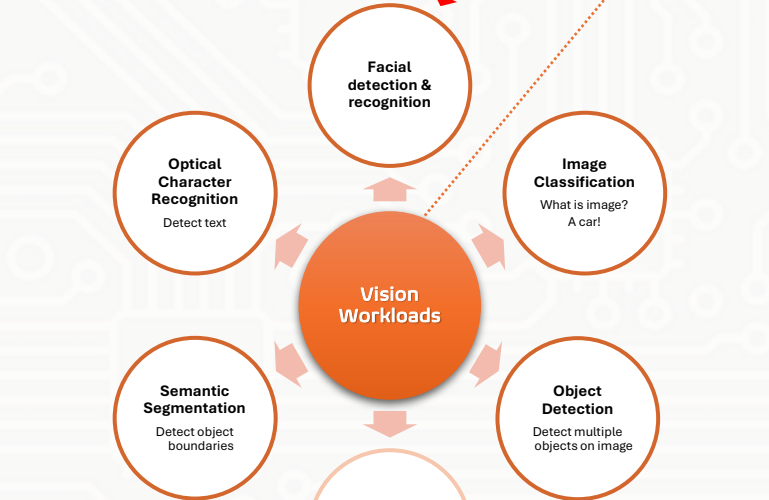
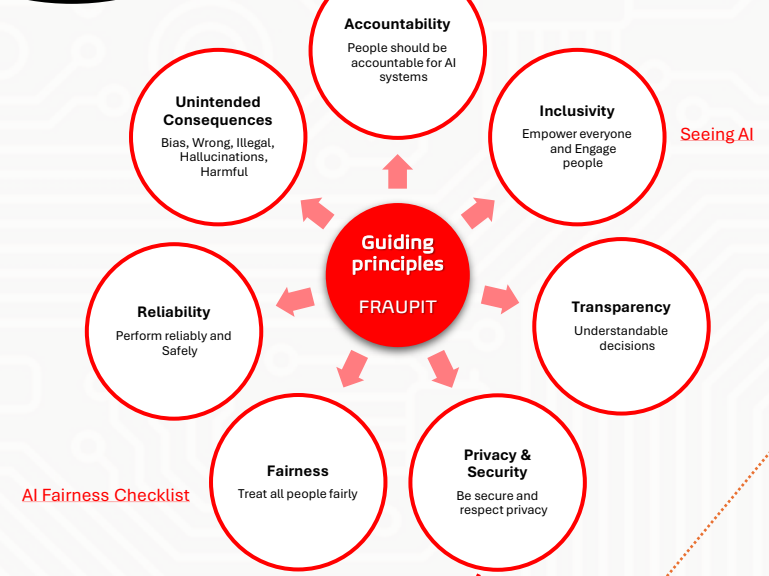
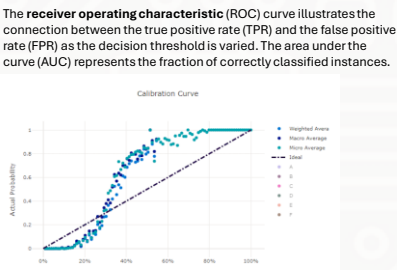
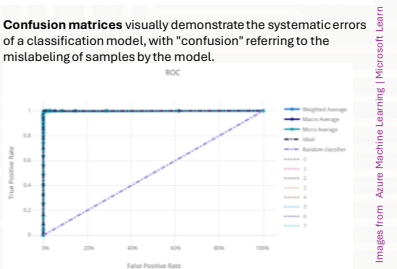
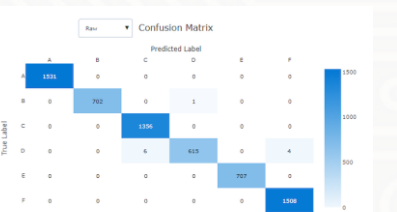
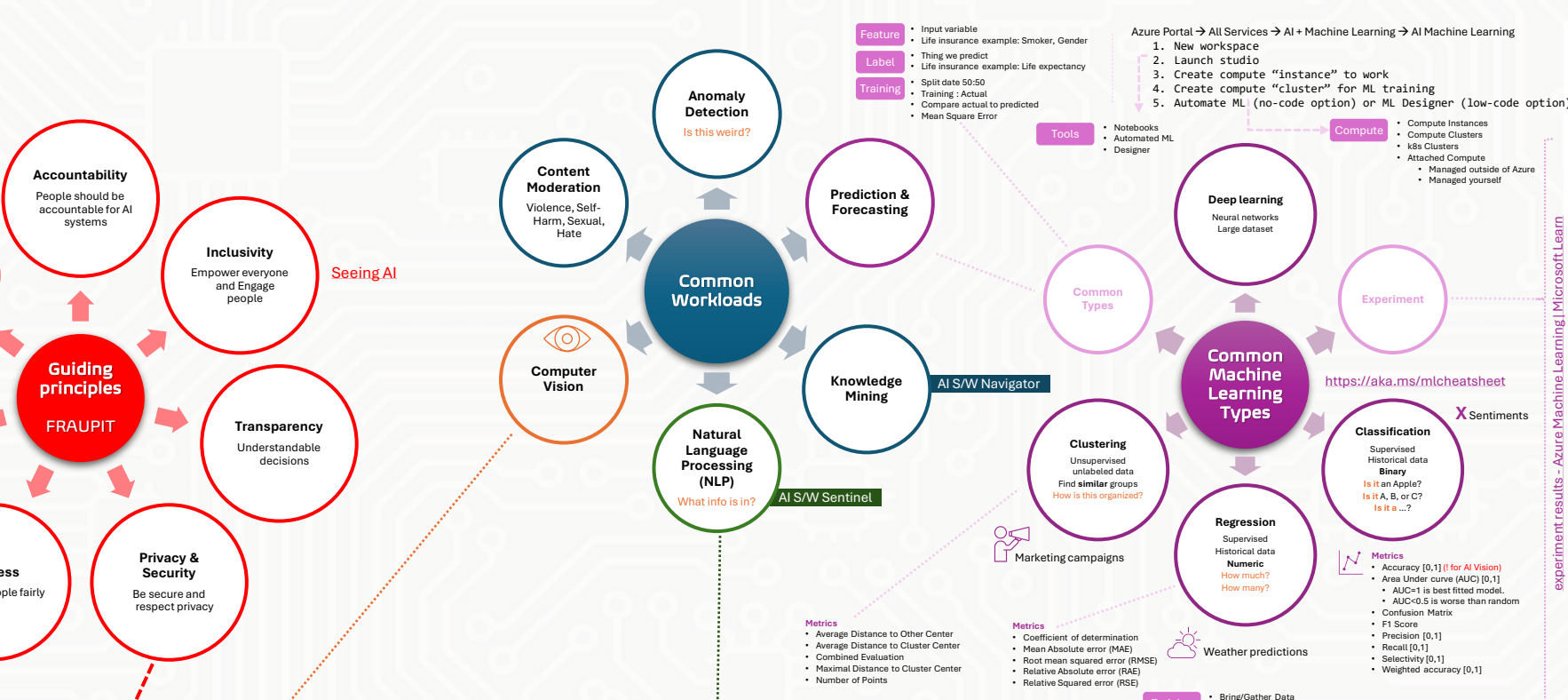
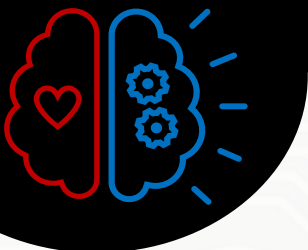


Azure AI-900 Artificial Intelligence (AI) Cheat sheet v2024.09.28



- Cognitive Services**
- Umbrella service
 - Includes many other services
- Computer Vision Services**
- Pre-trained LM model
 - Can recognize and categorize 10,000 objects
 - Detect faces and text recognition
- Custom Vision Services**
- Model you can build and train
 - Classification or object detection (class name, probability score, bounding box)
- Face Services**
- Recognize a human face on an image
 - Returns coordinates of 1+ faces
 - Recognizes pre-trained celebrities
- Face Detection: Gender, Age, Face boundaries
 - Face Verification: Compare faces, Identify if same individual
 - Similar Faces: Identify similar faces
 - Face Grouping: Divides a set of unknown faces into groups based on similarities
 - Identify API: Identify (assign names) to faces
- Form Recognizer Service**
- Ideal for invoices and receipts
 - Pre-built or custom model
 - Pre-built = English in USA
- AI Video Indexer**
- Build on Az Media Services and Azure AI Services (Face, Translator, Vision, Speech)
 - Allows extraction of insights from videos

- Text Analysis Service**
- Key phrase extraction
 - Entity detection
 - Sentiment analysis (positive=1, neutral=0.5, negative=0)
 - Language detection
 - Returns NaN for undetermined
- Language Understanding Service (LUIS)**
- Understand natural language
 - Utterances - when do you close?
 - Entities - today (date time)
 - Intents - goal: total hours of operation
 - No intent - what is the meaning of life?
- Speech Service**
- Text to speech
 - Speech to text
 - Auto translation
 - Custom voice models
- Translator Text Service**
- Translate between 70 languages
 - Custom models
 - Language detection
 - ISO 6391 Code
 - Language Name
 - Score
- Agents or Bots**
- Conversational AI
 - Computer and humans talk
 - Operate over web, email, social media, and voice
- Conversational Services**
- QnA Maker Service - codeless chatbot
 - Azure Bot Service - Enterprise grade

- Others**
- Discovery
 - Gaming
 - Security
 - Simulations
- Image Creation**
- Art
 - Impressionism
 - Face
- Text Generation**
- ChatGPT
 - Copilot
- Video Generation**
- Deep Fakes
 - Animation
- Music, Audio Generation**
- Voice synthesis
 - Sound effects
- Code Generation**
- Copilot Studio (low code)
 - Azure AI Studio (Paas)
- Dangers**
- Deep fakes
 - Impersonation
 - Harmful
 - Discriminating
- Process**
- Identify harm - what is worst case scenario?
 - Measure harms - try to generate harmful content
 - Mitigate harms - fine-tune model and filters, meta prompts, grounding data
 - Operate responsibly - monitor, feedback, track telemetry

Azure Portal -> All Services -> AI + Machine Learning