**\*\*Data Science\*\* | Looking closely at LOTS of information (called "data").| Finding patterns and understanding what all that info means. | Being a detective with a huge pile of clues to sort! |**

**| \*\*Machine Learning\*\* | Teaching computers to learn from examples, without being told every single step. | Gets better at tasks the more examples it sees, like recognizing pictures or sounds. | Teaching a robot pet new tricks by showing it over and over! |**

**| \*\*NLP (Natural Language Processing)\*\* | Helping computers understand human language (like English, Spanish, etc.). | Reading, understanding, and talking like people do. | Your smart speaker (like Alexa or Google Home) or a translator app! |**

**| \*\*Deep Learning\*\* | A special \*type\* of Machine Learning that uses many layers to learn deeper. | Solves really hard problems like recognizing faces in photos or understanding complicated sentences. | Building a really tall, complex structure with many layers of building blocks! |**

**| \*\*Neural Network\*\* | The "brain-like" structure Deep Learning uses inside the computer. | It's the network of connections that helps the computer learn deeply and find patterns. | A network of tiny light bulbs sending messages to each other to figure things out! |**

**| \*\*Generative AI\*\* | AI that can \*create\* brand new things. | Writes stories, draws pictures, makes music, or creates new ideas based on what it learned. | An amazing robot artist or storyteller that makes things up! |**

**| \*\*Agentic AI\*\* | AI that can make its \*own decisions\* and take action to reach a goal. | Plans steps and does things on its own to achieve something without needing constant instructions. | A super helpful assistant robot that knows what you need and just does it! |**

**| \*\*MCP (from a movie!)\*\* | (This is from the movie Tron!) A very powerful computer program. | In the movie, it tries to control everything. It's a \*fictional\* computer villain. | A super powerful computer character from a sci-fi story, not a real type of AI today! |**

**| \*\*AGI (Artificial General Intelligence)\*\* | AI that is as smart as a human \*at everything\* (learning, thinking, creating). | Can learn, think, solve problems, and be creative just like a person can (this doesn't exist yet!). | A future robot friend who is super, super smart and can do anything a human can! |**

**QUANTUM COMPUTERING**

**ROBOTICS**

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