Data has now become one of the most important business assets, and data science enables us to turn this data into value. There’s nothing constant in our lives but change. In the field of data also, we can see fast evolutions and new advances, especially in artificial intelligence and machine learning.

Here, we look at the five biggest data science trends for **2022**:

**. Tiny ML**

Tiny ML or Tiny Machine Learning is one of the fastest-growing fields of Machine Learning. It sits right at the intersection of Embedded Systems, ML Algorithms, and Computing Hardware.

Have you thought about how our phones always respond when we say *“Ok Google”* or “*Hey Siri”* or “*Alexa”*even when they are not connected to the internet? How are they continuously listening?

All thanks to Tiny ML!

Small neural networks of size as low as **14-kilo bytes**, trained to detect these vague words are locally deployed on **DSP chips** in the phone, which only request a few milliwatts of power to run, instead of the phone's CPU, which utilizes more processing power.

So we can say that Tiny ML is a field of study that involves running complex models on ultra-low powered microcontrollers.

Though Tiny ML is relatively a new field, it has been in production for a long time by tech giants like Apple, Google, and Amazon to name a few.

# ****2. Auto ML (Automated Machine Learning)****

Most AI is powered by Machine Learning and the way things stand right now, you have to find someone to build a Machine Learning model for you.

But with Auto ML, you will only need to worry about one thing,  
“Ingesting” your data and the rest will be taken care of by Auto ML Framework!

It’s cool, isn’t it?

A huge part of a data scientist’s job is spent on data cleansing and preparation, and each of these tasks is time-consuming. Auto ML ensures that these tasks are automated, and it involves building models and creating algorithms and neural networks.

# ****3. Data-Driven Customer Experience****

Businesses will increasingly rely on data to build worthwhile, valuable, and enjoyable experiences. This has been accelerated over the last few years.

Now we are using data to create more user-friendly interfaces, using things like **AR (Augmented Reality),**we can now use **AI chatbots** which are more realistic than ever. We have seen the introduction of **cashier-less convenient stores** from Amazon and a greater level of personalization in the goods and services we are selling.

This will be a massive focus for many people working in the field of Data Science in 2022.

# ****4. AIaaS (AI as a Service)****

No doubt it is interesting to know why AI is served as a Service.  
What are the types of this service? Moreover, who are the vendors that are providing these services?

There are 2 crucial parts of any AI service — hardware and software.

Hardware plays a significant role which involves processor technology, GPU, and expensive components like custom, silicon, etc.

At the same time, from the software point of view, implementing AI software services need expert knowledge in Machine Learning Algorithms.

There comes AI as a Service, which is a third-party offering of Artificial Intelligence outsourcing. It is nothing but cloud-based AI products.

AI Services can be categorized into different subgroups like — Pre-built AI capabilities, Cognitive search, Custom AI development, etc.

# ****5. Augmented Analytics****

According to Gartner, “Augmented Analytics is an approach to analytics that automates insights using Machine Learning and Natural Language Processing”.

It assists both professional and amateur data scientists by automating the preparation of data to generate and gather insights. Enterprises need less time to process data and generate insights from it. The outcome is also more precise, resulting in better selections.

AI, ML, and NLP algorithms enable experts to examine data and provide in-depth reports and forecasts by assisting with data preparation, data processing, analytics, and visualization.

These are the 5 biggest trends in Data Science in 2022 according to me.

Hope you liked my article :)