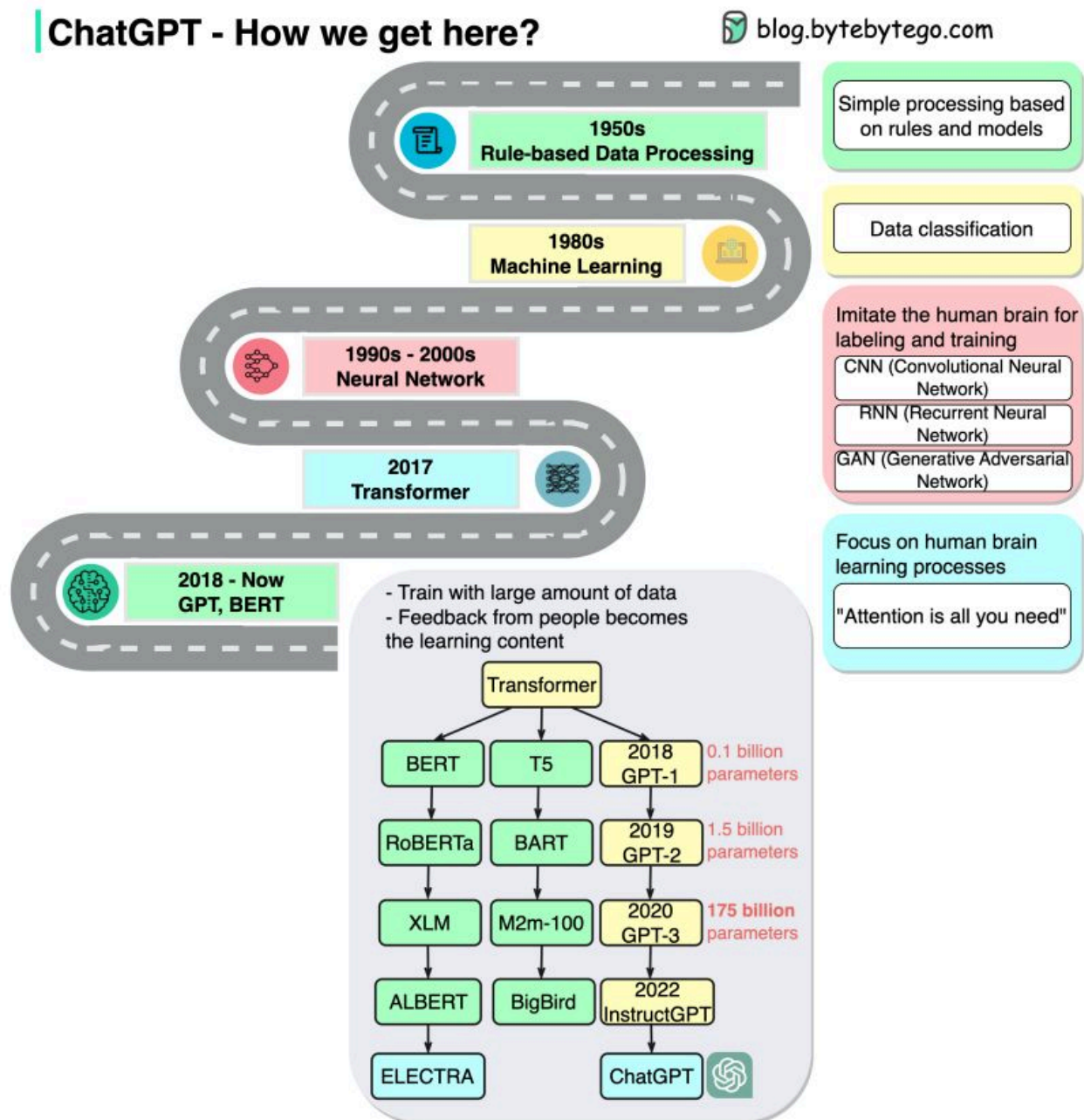


ChatGPT - timeline

A picture is worth a thousand words. ChatGPT seems to come out of nowhere. Little did we know that it was built on top of decades of research.

The diagram below shows how we get here.



- 1950s
In this stage, people still used primitive models that are based on rules.

- 1980s
Since the 1980s, machine learning started to pick up and was used for classification. The training was conducted on a small range of data.
- 1990s - 2000s
Since the 1990s, neural networks started to imitate human brains for labeling and training. There are generally 3 types:
 - CNN (Convolutional Neural Network): often used in visual-related tasks.
 - RNN (Recurrent Neural Network): useful in natural language tasks
 - GAN (Generative Adversarial Network): comprised of two networks(Generative and Discriminative). This is a generative model that can generate novel images that look alike.
- 2017
“Attention is all you need” represents the foundation of generative AI. The transformer model greatly shortens the training time by parallelism.
- 2018 - Now
In this stage, due to the major progress of the transformer model, we see various models train on a massive amount of data. Human demonstration becomes the learning content of the model. We’ve seen many AI writers that can write articles, news, technical docs, and even code. This has great commercial value as well and sets off a global whirlwind.