Introduction to Deep Learning

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Deep Learning

Figure 1 Estimating the length of a foot

Figure 1 illustrate how this estimator works. 16 adult men were asked to line up in a row, when leaving church. Their aggregate length was then divided by 16 to obtain an estimate for what now amounts to 1 foot.

This 'algorithm' was later improved to deal with misshapen feet – the 2 men with the shortest and longest feet respectively were sent away, averaging only over the remainder. This is one of the earliest examples of the trimmed mean estimate.
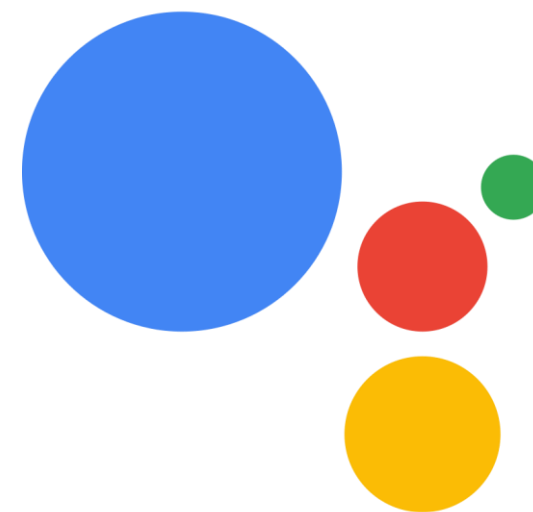
The Road to Deep Learning

Decade	Dataset	Memory	Floating Point Calculations per Second
1970	100 (Iris)	1 KB	100 KF (Intel 8080)
1980	1 K (House prices in Boston)	100 KB	1 MF (Intel 80186)
1990	10 K (optical character recognition)	10 MB	10 MF (Intel 80486)
2000	10 M (web pages)	100 MB	1 GF (Intel Core)
2010	10 G (advertising)	1 GB	1 TF (Nvidia C2050)
2020	1 T (social network)	100 GB	1 PF (Nvidia DGX-2)

Dataset versus computer memory and computational power

Success Stories

Thanks!

Does anyone have any questions?

Twitter: @walkercet
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Resources

Dive into Deep Learning