1 Introduction

I love doughnuts. Doughnuts are delicious and healthy. Wouldn’t it be great if neural networks could classify doughnuts. Then I wouldn’t make the mistake of eating a bagel instead of a doughnut.

Let \( x \in \mathbb{R}^n \) denote a doughnut. Let \( \phi_w \) denote a neural network. (I spent $200 on doughnuts last year!)

If

\[
\phi_w(x) = 1,
\]

then I will eat the doughnut.

2 Theory

Neural networks are very useful [1].

I also love normal distributions

\[
\Phi(x) = \frac{1}{\sqrt{2\pi}} \int_{-\infty}^{x} e^{-\frac{1}{2}y^2} dy \tag{1}
\]

3 Conclusion

I will train a neural network to recognize doughnuts that I would like to eat. My favorite book on \( \LaTeX \) is Reference [2]. But there are more tutorials at \texttt{www.latex-project.org}.

References


[2] Helmut Kopka and Patrick Daly, \textit{Guide to \LaTeX}, Addison-Wesley, Boston, MA, 2004