## **Inhaltsverzeichnis**

1 Introduction

## Chapter 1: Introduction

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Lecturer:Bin Yang By: Nicolas Hornek

Signal processing (SP)  $\leftrightarrow$  Machine learning (ML): SP is model based, ML is learning-base. data-driven

ML task: Classification: dicrete valued output, Regression continous valued output Supervised learning: desired output or ground truth is available

Unsupervised learning: desired output/ground truth is not available; Most of DL is supervised learning

3 Steps of ML> Training  $\rightarrow$  Test  $\rightarrow$  Deployment on new Data

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Neural Network(NN): input layer  $\overset{Inputshape}{\to}$  hidden layer  $\to$  ...  $\to$  hidden layer  $\to$  output layer  $\to$  output

## Chapter 2: Tools for Deep Learning

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## Chapter 3: Machine Learnin Basics

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Lecturer:Bin Yang By: Nicolas Hornek

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