

THEORY BOOK IT INTRO

FOURTH EDITION

Compiled by Alf Inge Wang, Rune Sætre, Terje Rydland, Anders Christensen, Guttorm Sindre NTNU

TDT 4105/4110

ALWAYS LEARNING PEARSON

Theory Book IT Intro

IT Theory Book 2018

Table of Contents

Cover

Hardware Intro

Defining Information Technology

Principles of Computer Operations

Digital Representation

Representing Information Digitally

Representing Multimedia Digitally

Representing Integers

Algorithms

Algorithms

Network

Introduction And Overview

Internet Trends

Reliability And Channel Coding

Local Area Networks: Packets, Frames, And Topologies

Internetworking: Concepts, Architecture, And Protocols

IP: Internet Addressing

TCP: Reliable Transport Service

Network Performance (QoS And DiffServ)

Network Security

The Internet Of Things

Index