

2021

# Courses Taken

Fuat Ozan Dengiz

## ❖ TALLINN UNIVERSITY OF TECHNOLOGY (2018 – 2021)

### ◆ Master of Science; Mechatronics Engineering Department

- **Engineering**

Advanced Robotics

Control Instrumentation

Data Acquisition Means and Methods

Dynamics of Robots and Machines

Electronics

Fundamentals of Sustainable Energy Engineering

Mechatronics and Smart Systems

Mechatronics Systems Modeling and Control

Microprocessor Systems

Modeling and Identification

Robotics

- **Laboratories**

Advanced Robotics (Matlab & Solidworks)

Control Instrumentation (Automation Builder & Codesys)

Data Acquisition Means and Methods (LabView)

Electronics (OpAmp)

Mechatronics Systems Modeling and Control (Solidworks & LabView & Matlab)

Microprocessor Systems (Assembly)

Modeling and Identification (Matlab)

Robotics (Linux)

- **Projects**

ABB YuMi Dual Arm Co-Simulation (LabVIEW & SolidWorks)

ABB YuMi Dual Arm Simulation (MATLAB - Simulink & SolidWorks)

Micro-CAT Underwater Robot (ROS on Ubuntu & Arduino with C++)

Application Business Plan

Research on Current 3D Technologies

Upper-Body Exoskeleton Research for Human Augmentation

Upper-Body Exoskeleton Motion Simulation

- **M. Sc. Thesis**

Development of an Upper-Body Exoskeleton

- **Others**

English for Science and Research

Entrepreneurship and Business Planning

❖ **RWTH AACHEN UNIVERSITY (2019 – 2020)**

- ◆ **Master of Science; Faculty of Mechanical Engineering**
- ◆ **Faculty of Electrical Engineering and Information Technology**
- ◆ **Faculty of Mathematics, Computer Science and Natural Sciences**
  - **Medical Information Technology**  
Advanced Control Systems
  - **Institute of Materials in Electrical Engineering**  
Materials of Electrical Engineering Seminar
  - **Laboratory for Machine Tools and Production Engineering**  
Mechatronics and Control for Production Plants
  - **Research Group Software Construction**  
Object-Oriented Software Construction
  - **Institute of Mechanism Theory, Dynamics of Machine and Robotics**  
Robotic Systems

## ❖ **ABB MASTERCLASS (2019)**

### ◆ **New Product Development and Implementation in Production**

Electrical machine Design

Industrial Digitalization

Industrial Engineering

Lean Six Sigma in Production

New Product Development Systems

Production Management

Project Management

Reliability and Failure Analysis in Electronics

Robotics in production

Software Development

Validating the Designs

Voice of Customer

## ❖ **FIGES BUILDUP ACADEMY (2017 – 2018)**

### ◆ **R&D Engineering for Electrical and Electronics Engineers**

- **MathWorks Software**

Control System Design with MATLAB and Simulink

Fundamentals of Code Generation for Embedded Applications in Simulink

Generating HDL Code from Simulink

MATLAB Fundamentals

Signal Processing with MATLAB

Simulink for System and Algorithm Modeling

Simulink Model Management and Architecture

Stateflow for Automotive Applications in Simulink

Verification and Validation of Simulink Models

- **ANSYS Software**

Antenna Layout and High Frequency Electromagnetics Analysis with HFSS

Electromechanical and Low Frequency Electromagnetics Analysis with Maxwell

Model Based Software Development with SCADE

Power Electronics and System Modelling with Simplorer

- **Technical**

Analysis and Control of Linear Systems

Beckhoff PLC Programming with TwinCAT

Bond Graph Theory

Digital Design with VHDL

Introduction to Electromagnetics Simulations

- **Soft Skill**

Career and Professional Life for Engineers

Creative and Innovative Thinking

Effective Communication, Body Language and CV Preparation

Project Management in R&D

- **Others**

Fundamentals of Systems and Software Engineering

Problem Solving with TRIZ

Technical Reporting and Presentation

❖ **ÖZYEĞİN UNIVERSITY (2012 – 2017)**

◆ **Bachelor of Science; Electrical and Electronics Engineering Department**

- **Certificate**

Programmable Logic Controllers

Project Management

- **Engineering**

Basics of Electrical Machines

Circuit Analysis

Computer Programming with Java

Control Systems with MATLAB

Digital Signal Processing

Digital Systems

Electromagnetics

Electronics 1

Electronics 2

Engineering Computation with MATLAB

Fundamentals of Communication Systems

Introduction to Mechatronics

Microprocessors

Object-Oriented Programming with Java

Physics 1

Physics 2

Signals and Systems



- **Mathematics**

Calculus for Engineering 1

Calculus for Engineering 2

Differential Equations

Discrete Mathematics

Linear Algebra

Probability and Statistics

- **Laboratories**

Circuit Analysis

Communication Systems with LabVIEW

Digital Systems

Electronics 1

Electronics 2

Java Programming

MATLAB

Mechatronics

Microprocessors

Physics 1

Physics 2

- **Projects**

Block Breaker Game (Java)

Electronic Hotel Safe (Digital Design)

IoT Project (Technology and Society)

Mini Sumo (Microprocessors)

Setup of Force Measurement System Using a Fluidic Muscle (Mechatronics)

Space Invaders Game (Java)

Term Project (Entrepreneurship)

Term Project (Project Management)

Term Project (Technical Presentation)

Term Project (Technical Writing)

- **B. Sc. Thesis**

Martial Arts Training Gadget (Patented)

- **Others**

French 1

French 2

General Psychology

History of Civilization

Introduction to Business 1

Introduction to Business 2

Introduction to Economics

Photography

Technical Presentation

Technical Writing

Technology and Society

❖ **FESTO DIDACTIC (2015)**

◆ **Mechatronics for Undergraduates**

Applied Mechatronics Project

Industrial Electrics

Pneumatics

Programmable Logic Controllers

Sensors

Servo Motors and Drivers

❖ **SABANCI UNIVERSITY (2011 – 2012)**

◆ **Summer School for High School Students**

Mechatronics and Humanoid Robots

Universities and Sectors

Quantum Mechanics and Nano Science

❖ **BOĞAZIÇI UNIVERSITY (2009)**

◆ **Summer School for High School Students**

Science Courses

Sectoral Talks

## ❖ ONLINE COURSES

### ◆ University of Pennsylvania

Robotics: Fundamentals

### ◆ Columbia University

Artificial Intelligence

Machine Learning

Robotics