



QATAR UNIVERSITY

COLLEGE OF ENGINEERING  
COMPUTER SCIENCE & ENGINEERING DEPARTMENT

SUMMER\_2022

CMPE 399 – PRACTICAL TRAINING  
30270\_L51

Instructor: Prof. Noora Fetais

## Progress Report

June 20, 2022

Marim Elhanafy 201803468

**To:** Prof. Noora Fetais  
**From:** Marim Elhanafy  
**Subject:** Progress of My Internship Activities at Turkish Aerospace (TAI)

Dear Prof. Noora Fetais

Please find my progress report that cover my activities during the period from 7<sup>th</sup> June – 16<sup>th</sup> June 2022.

Student Name: Marim Elhanafy

Semester: Summer 2022

Work Email: mariammahmooud.alhanafi@tai.com.tr

Yours Sincerely,

Marim Elhanafy



### i. Introduction:

I started my internship work term with the software department in Turkish Aerospace (TAI). During my first week I was assigned mentor and got some safety induction as well as get to know some of the people around the department as well as understand more in-depth about the company. I did a lot of reading from company annual reports, marketing materials, etc. This laid an excellent foundation for me fully understand the company activities. I looked through the company information on the company Intranet, that give me good orientation and becoming familiar with the company.

### ii. About the Company Organization & Industry

Turkish Aerospace is one of the leading aerospace companies in the world. It is known for expanding the defense industry in Turkey and producing a range of locally produced aircraft such as helicopters and fighter jets.

It is one of the fastest growing companies in the defense industries with an employee count of more than 10,000 people, as well as branches in different parts of the world such as the USA and Malaysia.

They have many active projects in different fields of the defense aerospace industry including helicopters, fighter jets, reconnaissance satellites and unmanned aerial vehicles.

### iii. Specialized training

The internship started with two specialized training courses which are health and safety course and Information security course. The health and safety course was related to necessary precautions and warning that must be taken into consideration when working in a factory. The information security course was related to cyber security and protecting electronic data and data confidentiality.

### iv. Activities

- Week-1 (May 29-2<sup>nd</sup> June 2022)
- ✓ Monday (reading some documents related to ARINC 429)
- ✓ Tuesday (read about message characteristics of digital information transfer system)
- ✓ Wednesday (read about message bit layout)
- ✓ Thursday (implement some code about bit layout)
- ✓ Friday (implement some header files)

### v. Any update on Your Work Learning Plan Objectives/Goals

Reading about ARINC 429 which is the most widely used data bus standard in aviation and implement some code which enhanced my coding skills in using C language, starting with call by value and call by reference, and create my own header file with appropriate standards. In addition, there has been some progress with the development of encoding and decoding ARINC 429 messages using the C language.