

## M.A.Sc Software Eng. ECE **UNIVERSITY OF WATERLOO**

2019-Present

Supervised by Prof. Mahesh Tripunitara & Prof. Catherine Rosenberg cGPA 93%

#### **B.Sc Electrical and Electronics Eng.**

METU - Turkey 2014-2019 Honour Student, in the top 10%

## **Exchange Student**

KAIST- Korea 2016

## **Exchange Student**

NTU-Singapore 2016



#### **EXPERIENCED**

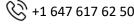
C/C++, Python MySQL, mongoDB, CUDA HTML, CSS, JS/Node, Git, CI/CD

#### **COMPETENT**

Verilog, VHDL, NI Labview, KeyCreator CAD, LTSpice

# Yekta Demirci|Software Engineer| ## yektademirci.com

- Ambitious M.A.Sc. candidate at University of Waterloo (Software Engineering spec.)
- Passionate to develop further software engineering (back-end) and data science skills.
- Current research work focuses on SLA enforcement in software defined RAN settings.







#### **WORK EXPERIENCE**

## ase san ASELSAN | ANKARA | Software Engineer

06/19 - 09/19

- > Successfully implemented the followings on JETSON TX2 device:
- Real time edge detecting with a basic user interface to change some parameters (Gaussian Blur window size, sigma etc.) using built-in CUDA modules in C++.
- Real time green ball detecting using built-in CUDA modules in C++.
- Matrix multiplication and matrix addition in .cu



WASHINGTO! **GEMSEC lab** | SEATTLE | ML Research Intern

07/18 - 09/18

- > Pushed myself out of my comfort zone by travelling to the USA
- > Implemented an application that takes a few hundred metal binding peptides, preprocesses the data, creates different tensors and predicts new ones within an hour.
- Used feature extraction techniques (PCA & wavelet transforms) to create diff. tensors
- Used some clustering algorithms to see the relation betw. some prop. and metal bin.
- "A Generalized Similarity Metric for Predicting Peptide Binding Affinity" bioRxiv



MSICL lab | DAEJEON | Summer Research Observer

07/17 - 08/17



TAI | ANKARA | Avionics Software Engineer Intern

06/16 - 07/16

## **SERVICE & LEADERSHIP**



Volunteer Tutor 01-06/21

Family & Children Service Waterloo

Leader Scout 2014-2016 METU scout team

#### SOME PROJECTS

- ➤ Food Hunter Web Application 2021
- Developed a web app. w. a group of 5 people using HTML, CSS, JS, mDB, agile methods
- > Flow level, HTTP-2 Classification with Machine Learning Algorithms 2020
- A publicly available web traffic collection is investigated by KNN, SVM, CART, ANN
- ➤ Performance Analysis of different Vertex Cover Approx. Alg. w. Multi-Thread 2019
- Concurrently run a SAT solver and 2 approximation algorithms for a VC-problem
- ➤ Relevance between # of Friendships and # of Connected Communities 2019
- A publicly available social network is investigated via modified DFS- betweenness
- ➤ Design and Implementation of an Autonomous Map Extraction Robot 2018
- Designed and built a robot with a group of 5 people as a bachelor capstone project • Used the concepts learnt through undergrad like control theory, signal process. etc.
- > Implementation of FFT & Overlap-and-Save Algorithm in myRIO 2018
- Implemented FFT, Overlap-Save algorithms in C, run in real time on linux based OS

## **AWARDS & HONOURS**



#### **Graduate Research Studentship**

UoWaterloo 2019-2021

Int. Master's Award of Excellence UoWaterloo 2019-2021

474th, in the top 0.035%

Turkish National Uni. Entrance Exam 2014

# **ABOUT ME**



Backpacker (Visited +25 Countries)

**Experienced Line Cook** 

Amateur Sax Player

#### **SOME COURSES**

Grad: • ECE650: Methods & Tools for Software Eng. • ECE606: Algorithm Design & Analysis

- CS656: Computer Networks ECE657A: Data and Knowledge Modelling & Analysis
- ECE651: Foundations of Software Engineering ECE356: Database Systems
- Undergrad: EE435-436: Analog-Digital Telecom. EE497: Real Time App. Of Digital Signals
- CS466: Image Processing CS499: Introduction to Machine Learning EE441: Data Structures