

## EDUCATION



**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

## SKILLS



### EXPERIENCED

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

### COMPETENT

Verilog, VHDL, NI Labview,  
KeyCreator CAD, LTSpice

## SERVICE & LEADERSHIP



**Volunteer Tutor** 01-06/21  
Family & Children Service Waterloo

**Leader Scout** 2014-2016  
METU scout team

## 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

# 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.



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github.com/YektaDemirci

## WORK EXPERIENCE

**aselsan 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



**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

## 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

## 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