



education

Sabanci University

Istanbul, Turkey

Computer Science, B.Sc

Mathematics Minor

Major GPA

3.25

Dean's Honor List

Spring '16 & Spring '17

Expected Graduation

Spring '19

experience

Program Coordinator

Sep '17 - present

Sabanci University Engineering Society

Istanbul, Turkey

Formed competitive teams in fields of algorithms, data science, cybersecurity and mechatronics; organized recruitment events and preparation plans. Member of algorithms & data science teams.

Undergraduate Researcher

Jul '17 - Sep '17

Sabanci University

Istanbul, Turkey

Supervisor: Kamer Kaya

Attempted to increase cache utilization of canonical polyadic decomposition on sparse tensors by reordering them. Worked extensively with C++ and written high performance graph reordering algorithms on a high performance cluster.

course projects

Cryptography: Math & Coding

Spring '15

PROJ 102 - Project Course

Studied number theory, developed RSA OAEP and El Gamal public key cryptosystems in Python as a freshman.

Airport RDBMS

Spring '16

CS 306 - Database Systems

Full featured database management system designed for airports. Engineered using MySQL and PHP, designed by materialize-css & javascript. In this group project, my role was to design the front-end app and code it in HTML, CSS & js.

Starbucks Locations & 911 calls

Spring '16

CS 210 - Introduction to Data Science

Uncovered correlation among number of Starbucks stores per person vs number of 911 calls per person in Philadelphia. Performed statistical analysis, used decision trees and regressors for machine learning applications.

projects

Project Hangout [ongoing]

Sep '17 - present

React.js, Express.js, neo4j, PostgreSQL, Swift 3

An application where users form "circles", indicating that a group of users are currently in social interaction. By computing the shortest distances via follow-relationships on a graph database, the server computes the "closeness" among circles in order to predict if two circles may "merge" or not.

The system exploits the asynchronous nature of Node.js efficiently; various performance optimizations have been performed by performance profiling and tests.

I'm full stack engineering this application in order to have a solid understanding of the challenges in development of each layer in MVC model.

graphapp.herokuapp.com

Push Me

April '17

Express.js, MongoDB

A simple web application where clients push a button to have an entry in the database. Users can view the pushes made by other users by time, country and city. It can be considered as a basic CRUD application.

pushmeapp.herokuapp.com

See my GitHub profile for more projects

languages & technologies

Programming (proficient) C++, Python

Programming (familiar) Javascript, Swift 3, PHP

Frameworks & Libraries MERN Stack, Passport.js

Databases MongoDB, PostgreSQL, neo4j

non-technical

Classical Piano

Oct '15 - Present

- Followed Hanon's piano exercises
- Comfortable with all natural major scales and some minor scales
- Studied baroque era; played from Bach and Haendel

Electronic Music Production

Oct '15 - Present

- Comfortable using FL Studio 12
- 2 years of experience with subtractive and additive synthesis
- Used Harmor, Serum & Massive VSTs

Chess

Apr '15 - Dec '15

- Read Yasser Seirawan's opening & tactics books
- Studied Grünfeld defence and King's Indian Attack extensively