

ONUR KULAKSIZOĞLU

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TECHNICAL SKILLS

Programming Languages	Java, C#, Python, C++, C, R, SQL, Matlab, MIPS Assembly, System Verilog, Lisp.
Programs & IDE's	Intellij, Netbeans, RStudio, Git, Visual Studio, Sublime Text, SQL Server, Android Studio, Vivado, Spyder.
Natural Languages	Turkish (Native), English (Proficient), Latin (hobbyist)

EDUCATION

Bilkent University Ankara/Turkey	2014 Fall-Present
Pursuing a BS in Computer Science. Current cGPA: 3.86/4.00	
Expected Date of Graduation: 2019	
Yönelt Private High School Muğla/Turkey	2013 Fall-2014 Spring
Aydın Science High School Aydın/Turkey	2010 Fall-2013 Spring

RELEVANT COURSEWORK

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|---|---|
| - Algorithms and Programming I-II | - Fundamental Structures of Computer Science I-II |
| - Introduction to Machine Learning | - Programming Languages |
| - Operating Systems | - Database Systems |
| - Object-Oriented Software Engineering | - Discrete and Combinatorial Mathematics |
| - Linear Algebra and Differential Equations | - Basics of Signals and Systems |
| - Probability and Statistics for Engineers | - Artificial Intelligence |
| - Algorithms | - Game Theory |
| - Algorithms for Web-scale Data | |

TECHNICAL EXPERIENCE

My Github page: <https://github.com/onurkulak/>

Designing and Programming a strategy game called Magna Graecia Summer 2018

It's a one man project that I'm making everything, except the artworks (which are taken from Battle for Wesnoth). I'm programming it on Java, using JavaFX libraries for GUI.

Internship at Fraunhofer IIS, worked on a C++ GNSS Receiver project, GOOSE Summer 2018

GOOSE's aim is to use all available GNSS's and I implemented the Chinese Beidou system for the project. Tracking, symbol decoding and PVT parts of the Beidou receiver were done by me for Goose.

Made an attempt of AI to solve crossword puzzles of Joe Fagliano of NY Times Spring 2018

I prepared the GUI for the puzzle program, and also one of the modules used in solving the puzzle, namely a word similarity program using Gensim's word2vec. Idea was based on "Learning to Understand Phrases by Embedding the Dictionary" paper by Hill et al.

A tool to find the most influential poems and poets in Turkish language Spring 2018

This tool was based on the PageRank algorithm, it is implemented in Python. In the project I implemented the PageRank, TF-IDF, and matrix construction algorithms.

Designed and programmed a taxi sharing application using .NET Fall 2017

For the database systems' course project we made an Uber-like application for taxi sharing called Taxim. We used Microsoft SQL Server, C# and general .NET framework in the project.

Programmed a Doom(1993) AI using Reinforcement Learning in a project while Fall 2017

taking the Introduction to Machine Learning class. Agent tries to maximize his rewards by killing randomly spawned enemies. Project is written in **Python** and used **OpenAI** Doom environment.

Participated in Huawei Seeds For the Future Program, after selected as one of the Summer 2017

ten students from Turkey to the program received basic Chinese and ICT training at Beijing and Shenzhen for two weeks.

Research internship at Case Western Reserve University, Summer 2017

under supervision of Gürkan Bebek, Wrote programs in C++ and R, and developed a novel clustering algorithm, for to be used at autism causing genes' detection, early prediction of some complex diseases, and for measuring drug effectiveness's.

Facebook text messages analyzer, a data analysis project in Java. Summer 2017

Using the imported messages of a user, shows statistics about user's and his friends' word usages, frequency of their conversations, their word exchanges, most frequently used words in certain time periods etc. Unfortunately still in development.

Research lab member of Ercüment Çiçek and Öznur Taştan Okan Spring 2017

in Bilkent University working on a project related to measurement of 3D closeness and copying process of SNP's in the DNA. Mostly using Java.

- Designed and programmed a strategy game** called “Syracuse” in Java during my Object-Oriented Software Engineering course. Game was about governing a city-state during antiquity, inspired by Tropicco and Civilization Series. **Fall 2016**
- Created a space shooter game in System Verilog** during taking the Digital Design Course. Game was implemented on BASYS3 FPGA, and played on 8x8 led matrix. **Spring 2016**
- Programmed an Android application for sharing items** as a group project while taking Algorithms and Programming class. Project included databases, Android GUI, instant messaging between peers and few more as features, I was responsible from the Android GUI. **Fall 2015**

HONORS & ACTIVITIES

I'm the current Settlers of Catan Champion of Ankara, I won the elimination rounds for the Europe Catan Championship of 2017.

Ranked 1514th in 2014 Nationwide University Entrance Exam (LYS) among 2 million students and received comprehensive scholarship from Bilkent University.

I have six High-Honor certificates awarded between 2015 Fall and 2018 Spring seasons in Bilkent.

Current Vice President of Bilkent's board games club.

I'm interested in: chess, table tennis, board games, mythology, history (mostly ancient and medieval), art movies and Japanese culture.