**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**

* Algorithms and Programming I-II
* Introduction to Machine Learning
* Operating Systems
* Object-Oriented Software Engineering
* Linear Algebra and Differential Equations
* Probability and Statistics for Engineers
* Algorithms
* Algorithms for Web-scale Data
* Fundamental Structures of Computer

Science I-II

* Programming Languages
* Database Systems
* Discrete and Combinatorial

Mathematics

* Basics of Signals and Systems
* Artificial Intelligence
* Game Theory

**TECHNICAL EXPERIENCE**

**My Github page:** [**https://github.com/onurkulak/**](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 **Fall 2016**

Object-Oriented Software Engineering course. Game was about governing a city-state during antiquity, inspired by Tropico and Civilization Series.

**Created a space shooter game in System Verilog** during taking the Digital Design **Spring 2016**

Course. Game was implemented on BASYS3 FPGA, and played on 8x8 led matrix.

**Programmed an Android application for sharing items** as a group project while **Fall 2015**

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.

**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.