Boris Boyanov Tomov

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EDUCATION

University of California, Berkeley

Computer Science

High School of Mathematics, Bulgaria

2016-2021

2021 – Expected graduation: 2025

RELEVANT COURSEWORK

Structure, Design and Implementation of computer programs, Data Structures and Programming methodology, Designing Hardware Informational Systems I & II, Discrete Mathematics and Probability theory, Data analysis, Inferential Thinking and intro to ML.

WORK EXPERIENCE

Software Developer @ Code for Good Berkeley - February 2023 - now

- Collaborated with a team of software engineers to develop websites and web applications for non-profit organizations and foundations.
- Worked on improving the web application for the OneSky California foundation.

Software Development Internship – December 2022 - now

• Working on a project driven by my own interest in developing a chess move-calculating engine under the supervision of a senior software developer. The project is described below in the computer science projects section.

ASUC Student Union – Logistics Specialist (Job) – August 2022 - now University of California, Berkeley

- In the period of 9 months, I received two promotions and achieved the highest-ranking role possible for a student in the Event Services department. Managed all logistical operations within our student team. Improved my leadership and decision-making skills by acting as a mentor to new student assistants and helped them develop valuable professional skills.
- Tested and analyzed alternative software solutions and systems that would help increase efficiency within out workspace.

Computer Science Academic Intern

University of California, Berkeley

Helped teaching assistants during lab sessions by giving mini lectures on the course material and providing individual support to students.

COMPUTER SCIENCE PROJECTS AND PREPARATION

ChessCo - Chess Web Application (Java) - First Phase of Development

ChessCo is an online web platform dedicated to providing comprehensive chess education and training for users of all ages and skill levels. It serves as a companion, which slowly users through the complexities of the game and provides exposure to a variety of chess concepts and winning strategies. Feel free to visit the project spec if you are interested in learning more about ChessCo: ChessCo Application Spec

<u>Gitlet – Version Control System (Java)</u>

This project represents a version-control program, similar to Git Hub, which allows users to save entire directories of files into their local repository, restore older versions of files and browse through their save history. Users interact with it directly through the terminal of their computer by using predefined commands that execute the described functions above. Its purpose is to provide an easier and faster way for software workers to manage the versions of their files, not having to worry that their old progress is lost. The program also stores all file versions in a hidden computer repository which allows users to have organized and well-managed folders.

Programming Language Interpreter (Python)

This Python-written program parses a high-level programming language called Scheme, which is a dialect of the second oldest computer language used today – Lisp. Scheme is a functional programming language operating with functions called expressions. The interpreter breaks down those expressions and translates the commands into python using a tree-recursive method.

Other programming projects include arcade games that could be found in my GitHub account: Arcade Game GitHub

Electronic Devices and Hardware (Electrical circuit & Microprocessor Systems):

Voice-controlled mobile car powered by electric motors. The car is equipped with an analog sensor interface consisting of a microphone and two input converters (DAC & ADC), which supply digital input towards an Arduino microprocessor. There, the input is analyzed and classified by embedded software using simple machine learning algorithms that allow the car to follow and execute pre-defined voice commands. (Videos of performance can be found at my GitHub.

Programming Languages/Skills

Java(preferred), Python, C++, C#, HTML, CSS, JavaScript, MYSQL, NoSQL(basic understanding), Rest API, AWS(basic understanding), Learning React.js, Node.js and Mongo DB