matansegall@gmail.com 734-999-7349 5600 SMU Blvd Dallas, TX

EDUCATION: Southern Methodist University

Dallas TX

Bobby B. Lyle School of Engineering Graduation date: May 2021

Bachelor of Science in Computer Engineering, Minor in Mathematics

GPA: 3.94

*Full athletic scholarship to Southern Methodist University

Software Programs: C++, Python, Java, mySQL, MATLAB, Javascript, Node JS, React

Languages: Hebrew and English

RELEVANTML, AI, Data Bases, Data Structures, Algorithms, Computers Network, Robotic class, Scientific Computing,
Digital Logic Design, Single & Multivariable Calculus, Linear Algebra, Differential Equations, Statistic,

Mechanics & Electromagnetic & Modern Physics, Circuit & Signals Analysis, Circuit Controller

PROJECTS:

Product Design Spring 2020

• Collaborated with 7 teammates, 4 on the BackEnd side and 4 on the FrontEnd side, in a semester long project building a web product which connect between free-lancer journalists and potentials articles buyers by giving option buying, reviewing, and editing articles, as well as messaging between users

As part of the BackEnd side, I worked on connecting the database to the client side using Node JS and SQL queries

Search Engine Project Fall 2019

- Programmed a search engine contains 40,000 files of judicial protocol of criminal cases, which each includes author, date created, location, and the body of the protocol
- Implemented user interface which loads the file in two different data structures: hash table and AVL tree, could add more files if necessary, and use the AND, OR, and NOT searching operators
- Wrote more than 2000 lines of C++ code separate into 20 different files
- Designed an UML diagram of the project as well as analysis paper for the performance of each data structure used

Engineering Design Project

Spring 2019

- Collaborated with an interdisciplinary team of 5 as the project lead for computer science and electrical engineering deliverables to design, build, and program a robot
- Installed and configured sensors to measure temperature, incline, conductivity; used infra-red and ping sensor readings to enable robust navigation throughout a course
- Wrote and tested 900+ lines of Java code to accomplish assigned tasks
- · Configured electrical wiring between Arduino, sensors, and motors; debugged wiring issues using voltmeter

EXPERIENCE:

Teacher Assistant, Data Structures, Lyle School of Engineering, Southern Methodist University, Dallas, TX

Spring 2020

- Ran a weekly lab session along with other TA, explaining data structures concepts
- Graded coding project assignments along with exams, quizzes and homework
- Ran a weekly help desk answering coding related questions

Research Assistant, Lyle School of Engineering, Southern Methodist University, Dallas, TX

Spring-Summer 2019

- Named author on the research paper "Scan Chain Segmentation for Capture Power Reduction for Low Power Decompressed Patterns"
- Improved time efficiency of power reduction detection test by running tests in parallel using different servers
- Collaborated with PhD student to stay aligned on goals and vision for the project

Israeli Defense Force, Staff Sergeant, Israel

Spring 2014- Winter 2017

- Served in Ordnance Corps base assisting commanding officer with various duties
- Conducted fitness training for soldiers and officers

LEADERSHIP:

Southern Methodist University Swim Team

2018-2020

- Encourage team performance and camaraderie by leading workouts for 11+ practices requiring 25+ hours per week
- Played an integral role in helping SMU secure a Top-4 conference title (2019 Am Athletic Conf. Championships)
- MVP of the team for the year of 2019

Eastern Michigan University Swim Team

2017-2018

- 2nd place in the 200 Backstroke, member of the winning relay in Mid-American Conference championship March '18
- 3rd place in the 200 Backstroke in Mid-American Conference championship March '17