

Matan Segal

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5600 SMU Blvd Dallas, TX

EDUCATION:

Southern Methodist University

Bobby B. Lyle School of Engineering

Bachelor of Science in Computer Engineering, Minor in Mathematics

**Full athletic scholarship to Southern Methodist University*

Dallas TX

Graduation date: May 2021

GPA: 3.94

SKILLS:

Software Programs:

C++, Python, Java, MySQL, MATLAB, Javascript, Node JS, React, Swift

Languages:

Hebrew and English

RELEVANT

COURSES:

Operating Systems, ML, 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:

Instagram-Bot

Summer 2020

- Created a python script to automate Instagram account doing likes, random comments and follows
- Wrote 800+ lines of code, separated to five different files, followed by detailed documentation and example and posted as open source code

Product Design

Spring 2020

- Collaborated on a semester long project building a web product to connect journalists and article through an interactive website
- Connected the database to the client side using Node JS and SQL queries

Search Engine Project

Fall 2019

- Programmed a search engine containing 40,000 files of judicial protocol of criminal cases
- Implemented a 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 over 2,000 lines of C++ code separated into 20 different files
- Designed a UML diagram and analysis paper regarding data structures performance

Engineering Design Project

Spring 2019

- Designated as semester-long project leader for computer science and electrical engineering deliverables to design, build, and program a robot
- Installed and configured sensors to measure temperature, incline, and conductivity
- Implemented 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

Notes App in Android Studio

Summer 2018

- Reverse engineered Notes applications to design Android Notes app
- Wrote 500+ lines of Java code to store text, title, and dates which can be sent as an email
- Self-driven and self-taught, through debugging and iteration, I learned what it takes to create a usable application and became familiar with the Android development environment

EXPERIENCE:

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

Spring 2020 - Present

- Ran a weekly lab session explaining data structures and assisting group projects
- Graded coding project assignments as well as exams, quizzes, and homework
- Ran a weekly help desk answering coding related questions in C++, Java and Python

App Developer, AVBB, Dallas, TX (Remote)

Summer 2020

- Created an iOS app to control a camera tool via Bluetooth and serial communication
- Developed fundamental skills on Swift to fulfill design and functional requirement protocols

Research Assistant, Ben Gurion University of the Negev, Be'er Sheva, Israel

Summer 2020

- Collaborated with Biomechanical and a CS professors to develop an underwater movement analyzer
- Utilized open source library [Openpose](#) to locate different body parts
- Created EC2 AWS server with GPU to satisfy requirements of the library and increase performance

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

Spring-Summer 2019

- Co-authored research paper "Scan Chain Segmentation for Capture Power Reduction for Low Power Decompressed Patterns"
- Improved performance of power reduction detection test by testing in parallel servers
- Collaborated with PhD student to stay aligned on project goals and vision

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

- Encouraged 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-3 conference title (2020 Am Athletic Conf. Championships)
- Awarded team MVP in 2019

Captain of Israeli National Junior Swim Team

2013

- Elected by teammates and coaches; represented Israel in the European Junior Championship and int'l meets