ALEX SOLDIN

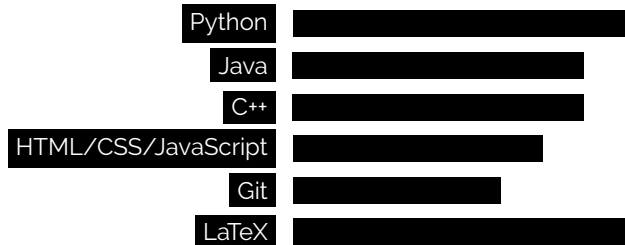## Electrical and Computer Engineering Student

Cape Town

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Alex Soldin

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WHO AM I?

I am a final year student at the University of Cape Town pursuing a Bachelor of Science in Electrical and Computer Engineering. I am motivated, ambitious and lively. I will give my absolute all to anything I do, regardless of the difficulties along the way. I enjoy problem solving while learning new skills for each new challenge. I am a warm, charismatic and friendly individual who enjoys human interaction.

Python

Java

C++

HTML/CSS/JavaScript

Git

LaTeX

EXPERIENCE

January 2020
Vacation Work

Data Scientist   **DataProphet**

I was assigned to a project where I was required to identify downtime or any inefficiency from various datasets. I focused on only a few parts of the overall production line. While conditions for downtime were provided for the furnaces, the downtime states for the other data sources were not defined and therefore required multiple investigations to what constituted downtime. Multiple signal processing methods were used to reduce noise thereby creating meaningful information to utilise.

`Python`

June 2019
Vacation Work

Embedded Software Engineer   **Jembi Health Systems**

I constructed the proof of concept for a digital scale to be integrated into the Journey Pilot project. Journey Pilot is a mobile based application that will allow Health Care Workers to effectively manage events related to child vaccinations by streamlining the various activities related to immunization tracking. Near Field Communication (NFC) cards are used to store a child's vaccination history. This digital scale reads the data already stored on the child's NFC card, the child is weighed using the load sensor and the mass is written onto the card and stored for future use. The child's growth can be documented and monitored to ensure healthy living.

`Arduino / C (Programming Language) / HX711 Load Cell / RFID-RC522`

November 2018
Vacation Work

Electrical Engineer   **Private**

I built two FPV racing drones under the supervision of Tom Edwards. These quads were built from an array of parts including an Electronic Speed Controller, Flight Controller and a Video Transmitter. The frame, motors, receivers and antenna were integrated with these main boards.

`Betaflight / BLHeli Studio / Fine Soldering / Grinding / Drilling`

July 2018
Vacation Work

Data Scientist   **Anglo American**

This internship provided a brief introduction to machine learning. I was able to explore various machine learning techniques as well as hear about the work that Dr. Liam Candy is doing as the head of data science.

`Python`

January 2017
Vacation Work

Embedded Software Engineer   **Dariel**

Part of a team of 4 engineering students tasked with creating a system to autonomously scan number plates of trucks on weigh bridges and capture data into a database. Developed embedded code and hardware for field equipment and a basic web API using Node JS in a very limited time frame.

`Python / JavaScript / NodeJS`

EDUCATION

2017 – 2020	**Undergraduate Honours**	**University of Cape Town**

Currently a 4th year student pursuing an electrical and computer engineering degree. This honours program focuses on both electrical engineering and computer science thereby providing the necessary knowledge and skills to merge the two disciplines.

2012 – 2016	**National Senior Certificate**	**King David High School Linksfield**

Matriculated with 7 distinctions in Mathematics, English, isiZulu, Physical Science, Information Technology, Hebrew and Life Orientation attaining a final average of 88%.

COURSES

2020	**The Web Developer Bootcamp - Colt Steele**	**Udemy**

ACHIEVEMENTS

2019	**Dean's Merit List**	**University of Cape Town**

Awarded for attaining a minimum weighted course average of 70%.

2019	**Professional Barista**	**Truth Coffee Roasting**

This five day course focused on multiple barista skills including coffee facts, cupping, equipment use, milk preparation, presentation and the various types of drink recipes. The final assessment comprised of a theory test and practical presentation which was graded by the trainers.

2016	**Academic Honours**	**King David High School Linksfield**

Awarded academic honours for matriculating with an average in excess of 85%.

2016	**Student Representative Council**	**King David High School Linksfield**

Elected as a prefect as well as a senior member of the Outreach committee by my peers and fellow committee members.

2015	**Global Youth Leadership Conference Attendee (Washington and New York)**	**Envision**

This program exposed me to working with future leaders from around the world and learning first-hand about international arbitration and diplomacy. The culturally diverse environment allowed me to develop my communication and debating skills.

2015	**Silver Level**	**The Presidents Award**

This program requires members to excel and partake regularly in physical recreation, a skill, a form of service (minimum of 48 hours) and an adventurous journey. I decided to swim, play guitar and volunteer at school and other charities respectively. I also participated in a four day hike in the Drakensburg mountain range.

LANGUAGES

English - home language
Zulu - limited proficiency
Hebrew - professional proficiency

EXTRA CURRICULAR

I love being on the squash court, in the swimming pool or in the gym. I enjoy building drones as well as other electrical systems. Drinking and brewing quality coffee forms an integral part of my daily life. I enjoy being in the game reserve surrounded by nature. I am also an avid user of Netflix, YouTube and PlayStation.

NON PROFIT

I have volunteered on behalf of both the Outreach committee and the Presidents Award - including multiple creches and tutoring programs as well as weekly collections at school.
I volunteered at Boikanyo where I planted a vegetable garden at an underprivileged school and ran the Santa Shoe Box initiative.

REFERENCES

2020	**Martin Weiss - Lead Solutions Engineer**	**Jembi Health System**

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