# XANDRO DA SILVA

## **Undergraduate Chemical Engineer**

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**♥** Pretoria, Gauteng

in https://www.linkedin.com/in/xandro-da-silva-615775201/

• https://github.com/Xando96



## **WORK EXPERIENCE**

### **Chemical Engineering Intern**

### **Octopi Solutions**

m Dec 2020 - March 2021

♥ Faerie Glen. Pretoria

- Introduction and learning of HTML5 and CSS2. Creation of my own personal profile website
- Introduction, learning and employment of computer hardware, namely; Raspberry Pi 3 Model B, ESP32-CAM micro-processor and TTGO ESP32 micro-processor.
- Raspberry Pi and micropython coding langauges.
- Construction and programming of a security camera system. Camera records a 10 second video, emails video and alerts homeowner.

**Programming** 

Software engineering

Researc

## **Chemical Engineering Intern**

### **Double Peak and Makomo Mine**

m Dec 2019 - Feb 2020

₱ Fourways, Johannesburg

- Two weeks were spent in the coal mine and a further four weeks were spent in the office.
- A successful investigation was completed on the inefficiencies of the plant's bucket factor measuring system and an in-depth analysis of the DMS plant.
- Data analysis of the mine's yearly coal production.
- Development of a simple cost model of the DMS plant.
- A presentation and technical report on my findings were presented, as well as recommendations for future investigations to be conducted for a more accurate cost-analysis of the DMS plant.

**Teamwork** 

Data Analysis

**Cost Analysis** 

Report Writing

### Teaching Assistant for FSK 116/176

#### University of Pretoria, Department of Physics

♥ Hatfield, Pretoria

- Planning and preparation of weekly physics practicals.
- Demonstration and teaching of the weekly practicals to the students.
- Marking of practical scripts and other administrative duties.
- Invigilation of final physics practical exam.

Planning

Teaching

**Public Speaking** 

Communication

## **EDUCATION**

Bachelor of Engineering (BEng) - Chemical Engineering University of Pretoria

₩ Feb 2016 - Dec 2021

♥ Hatfield, Gauteng

### National Senior Certificate

### **Pretoria Boys High School**

## Jan 2010 - Dec 2014

Pretoria, Gauteng

## PERSONAL PROFILE

I am a self-motivated individual driven by constant curiosity to learn and self-improve. A final year chemical engineering graduate seeking to use all the problem solving and technical skills harnessed during my undergraduate. I am passionate about technology, the economy and the environment. I believe these three passions should be integrated together in order to push society forward.

"Discipline equals freedom. "

## **SKILLS**

#### **Programming**

Python

HTML/CSS

LaTex

#### **Software**

Microsoft Office

**ASPEN Plus** 

Open Modellica

### **Technical**

Data Analysis

**Process Simulation** 

Mathematical Modelling

Report Writing

### **Soft Skills**

**Emotional intelligence** 

Collaborative

Leadership

Responsible

## **CERTIFICATIONS**

Tutor Training Course University of Pretoria

∰ Feb 2020

## **VOLUNTEER WORK**

Social Outreach

**Pretoria Boys High School** 

# Jan 2010 - Nov 2014

STARS Mentorship Programme

**University of Pretoria** 

march 2021 - Dec 2021