

# Francklin TOKIMITONDRA SOA

✉ [tokimitondrasoa.francklintf@gmail.com](mailto:tokimitondrasoa.francklintf@gmail.com)

☎ +261 34 86 779 61 / +261 32 79 223 98

📍 VS 12 BIS Antsahamamy Antananarivo, Madagascar

📅 07<sup>th</sup> June 1992 in Tsihombe



## PROFILE

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"I'm a [Geoscientist](#) and a [MERN Full stack Developer](#) with strong knowledge of a database development & administration and a Geographic Information System. Easily adaptable to any situations and I can work well as part of a team."

## WORK EXPERIENCE

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### Rio Tinto QMM (Quebec Madagascar Minerals)

08 February 2021 – 12 April 2021

- **Position:** Database developer
- **Mission:** Development of a geotechnical monitoring database for Slope, dump and tailings management
- **Tasks:**
  - Normalization of an existing non-organized data
  - Creating interfaces
  - Secure the database

### The Royal Botanic Gardens KEW

February 2020

- **Position:** Geographic Information System Analyst
- **Mission:** Detection remotely of wildfires in a protected area of Ankarafantsika
- **Tasks:**
  - Downloading the **Sentinel 2** image and calculate the **BAIS2** (Burned Area Index for Sentinel 2) with **NBR** (Normalized Burned Ratio) on **Earth Engine** by using **JavaScript**.
  - Supervised classification of the image
  - Numerical mapping on **ArcMap**
  - Presentation of the results

### SOA-PIDM (Geographic Information System - Statistics Training Center)

April 2018

- **Position:** Trainer
- **Mission:** Introducing the database development and management to the participant by using Microsoft Access

## PROJECT AND INTERNSHIP

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### Rio Tinto QMM (Quebec Madagascar Minerals)

19 April 2021 – November 2021

- **Position:** Hydrogeologist

**Mission:** Numerical simulation of an open pit dewatering system for a dry mining of an Ilmenite deposit in QMM Mandena Fort-Dauphin Madagascar by using MODFLOW

**Institute and Observatory of Geophysics of Antananarivo (IOGA)**

**Sept. 2018 – Nov. 2019**

- **Position:** Geographic Information System developer
- **Mission:**
  - Development of geophysical database
  - WebMapping

**Rio Tinto QMM (Quebec Madagascar Minerals)**

**November 2016 – February 2017**

- **Position:** Junior Geological Filed Assistant
- **Mission:** Development of geological and geotechnical database
- **Tasks:**
  - Visualization of the area of interest on **ArcGIS**
  - Geological drilling (preproduction drilling) and Dynamic Cone Penetrometer test
  - Collecting and gathering data into **Ms Access** and **AcQuire**
  - Creating table, form, query and macros in **Ms Access**

**Higher Institute and Technology of Anôsy (University of Toliara)**

**Sept - Oct 2016**

- **Internship**
- **Mission:** Geological mapping of Tsihombe district
- **Tasks:**
  - Visualization on ArcGIS and delimitation of the area of interest on Google-Earth
  - Rock identification in the field
  - Data collecting and gathering
  - Structural analysis on Stereonet

**WWF (World Wide Fund)**

**July 2014**

- **Internship**
- **Mission:** Understanding how WWF works in the south of Madagascar

## **EDUCATION**

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**University of Ankatso, Antananarivo  
Madagascar**

**May 2018 - November 2020**

- **Cursus:** Management of Minerals resources and environment
- **Mention:** Geoscience and Environment
- **Option:** Mining Geology
- **Grade:** Master II

**Institute and Observatory of Geophysics of  
Antananarivo (IOGA)**

**April 2018 - November 2019**

- **Cursus:** Science and technic in Geophysics & Geomatics
- **Mention:** Physic and applications
- **Option:** Applied Geophysics
- **Grade:** Master II

**University of Toliara**

**September 2013 – June 2017**

- **Mention:** Technic of marine and terrestrial environment
- **Option:** Geology
- **Grade:** Bachelor

## **TRAINING**

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**ArkeUp Academy - Ocean Indien**

**01 Mars – 22 April 2022**

- **MERN Full stack Developer**

**Rio Tinto QMM**

**November 2016**

- **Standard D3 et D5 (for slope, dump and tailings management)**

## **IT KNOWLEDGE**

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**System:** Microsoft Windows (07, 08, 10), GNU/Linux

**Geographic Information System software:** ArcGIS, QGIS, Oasis Montaj,

**Mine planning software:** Surpac

**Other software:** PIX4D, FME, Google Earth Pro

**Web technology, Database:** JavaScript, PHP, CSS, SQL

**Database Management System:** Microsoft Access, MySQL and MongoDB

**Word processing:** Microsoft office, libre office

## **INSTRUMENT**

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**Cartography:** GPS, Compass

**Subsurface mapping:** SYSCAL