# Molulaqhooa Linda Maoyi MSc

Email: Molulaqhooa.Maoyi@uct.ac.za

Phone: 021 650 3638 Cell: 073 073 8588

#### RESEARCH INTERESTS

Climate Modelling, Artificial Intelligence, Web and Mobile Technologies

#### PROFESSIONAL EXPERIENCE

2015 - CURRENT Full Stack Web Developer: University of Cape Town

# **Information and Communication Technology Services**

I provide technical leadership and develop specialised Web Applications and Websites as required from time to time using PHP, Java Script, HTML5 and CSS. I Oversee and manage web development projects as well as compiling business, technical and design requirements for web development projects.

# 2014 - 2015 TV Weather Anchor and Climatologist: eNews Channel Africa

I was responsible for forecasting and presenting live and recorded weather bulletins on etv and eNews Channel Africa. I Presented the Morning, afternoon and Prime-time Weather bulletins in English.

Here are the youtube links to the weather bulletins I've presented:

Morning Weather: <a href="https://www.youtube.com/watch?v=XglJ2wE1">https://www.youtube.com/watch?v=XglJ2wE1</a> Y0

Afternoon Weather: <a href="https://www.youtube.com/watch?v=F0wgDdxYM9k">https://www.youtube.com/watch?v=F0wgDdxYM9k</a>

Evening Weather: <a href="https://www.voutube.com/watch?v=BJSszPfPrD8">https://www.voutube.com/watch?v=BJSszPfPrD8</a>

# 2013 - 2014 Project Lead: eNews Channel Africa online Weather.

Facilitated the development of the eNCA (eNews Channel Africa) Weather portal and worked with different stakeholders i.e. Project Manager, Head of Design and Head of development to deliver the eNCA weather website. In addition, I also facilitated the development of the mobile version of the weather website and was mainly working on the back-end programming using PHP and contributed significantly to the look and feel of the product.

## **EDUCATION**

#### **CERTIFICATIONS**

# 2016 - Certificate in International Civilian Peacebuilding Capacity.

Scuola Superiore San'Ann, Italy and St Austine College, Johannesburg.

## 2016 - Certificate in Numerical Modelling with Applications to Landscape Evolution.

Grenoble Alples University, France and Nelson Mandela Metropolitan University.

## 2014 - Certificate in Individual Voice Program (Voice Training for Television).

The Voice Clinic, Cape Town

## **DEGREES**

**Currently PhD Atmospheric Sciences** 

**Provisional Thesis:** Understanding the Landfall of Tropical

Cyclones over the South West Indian Ocean.

**University of Cape Town** 

2013-2015 MSc Atmospheric Science : Climate Modeling

**Thesis:** Simulating the Characteristics of Tropical Cyclones over the South West Indian Ocean using an Adaptive Stretched-Grid

Global Climate Model.

**University of Cape Town** 

2012 BSc (Hons) Computer Science

**Thesis:** Threat Modelling in Social Networks using attack

centric model.

**University of Cape Town** 

2011 BSc Specialising in Computer Science, Oceanography &

**Atmospheric Science** 

**University of Cape Town** 

## **HONOURS AND AWARDS**

| 2016        | UCT Staff Bursary for PhD Studies                                    |  |
|-------------|--|--|
| 2013 - 2014 | National Research Foundation (NRF) Scholarship for Masters research. |  |
| 2012        | NRF Scholarship for Computer Science Honours                         |  |
| 2011        | Harry Crossley Foundation Bursary                                    |  |
| 2010        | Deiter Bock Bursary  |  |

# LEADERSHIP ROLES

| 2016        | Secretary General of the Science Post Graduate Student Council  |  |  |
|-------------|---|--|--|
| 2015        | Treasurer of the UCT Choir for Africa                           |  |  |
| 2012 - 2013 | Public Relations Officer of the UCT Choir for Africa            |  |  |
| 2011 - 2012 | Vice Chairman of the UCT Choir for Africa                       |  |  |
| 2009 - 2010 | Deputy Head of Information Technology at Leo Marquard Residence |  |  |
| 2008 - 2009 | House Comm Maintenance Representative at Leo Marquard Residence |  |  |
| 2006 - 2007 | Senior Council Member of the Randfontein High School Prefects   |  |  |

# **PUBLICATIONS**

# **Journal Paper**

"Simulating the Characteristics of Tropical Cyclones over the South West Indian Ocean using an adaptive stretched-grid Global Climate Model."

# **Book Chapter**

"Experiences with Threat Modeling on a Prototype Social Network" (2014)- Information

Security in Diverse Computing Environments. Edition: 1st, Chapter: 14, Publisher: Information Science Reference (an imprint of IGI Global), Editors: Anne Kayem,

Christoph Meinel, pp.261-279.

## **TECHNICAL SKILLS**

- Numerical Weather Forecasting
- Academic and Technical Writing
- Climate Modelling Software: FERRET, Numpy and Scipy, CDO, NCO, ParaView.
- Programming Languages: C++, FORTRAN, Python, Java, PHP, HTML5, JavaScript, CSS.
- Understanding of Object Orientated Programming and Design patterns.
- Understanding of data structures and algorithms.
- Databases: MYSQL, SQL
- Adobe Photoshop

## MEMBERSHIP AFFILIATIONS AND INTERESTS

- Full Accreditation by the British Computer Society as a Chartered IT Professional
- Member of the South African Society for Atmospheric Sciences
- Member of the UCT Athletics Club (long distance running)
- Member of the UCT Hip Hop Club (Poet)

| Title and Name    | Position and         | Email address           | Contact Number   |
|-------------------|----------------------|-------------------------|------------------|
|                   | institution          |                         |                  |
| Dr Babatunde      | PhD Supervisor,      | babiodun@csag.uct.ac.za | +27 21 650 5737  |
| Abiodun           | University of Cape   |                         |                  |
|                   | Town                 |                         |                  |
|                   |                      |                         |                  |
| Dr Arlindo Meque  | Researcher, National | Arlindo.Meque@gmail.com | +258 82 472 6300 |
|                   | Institute of         |                         |                  |
|                   | Meteorology, Maputo, |                         |                  |
|                   | Mozambique           |                         |                  |
| Dr Romaric        | Researcher, Federal  | christound@gmail.com    | +229 98 642 632  |
| Christel Odoulami | University of        |                         | +229 63 213 102  |
|                   | Technology, Akure,   |                         |                  |
|                   | Nigeria              |                         |                  |
| Dr Anne Kayem     | Senior Lecturer,     | Anne.Kayem@uct.ac.za    | +27 21 650 4313  |
|                   | Department of        |                         |                  |
|                   | Computer Science,    |                         |                  |
|                   | University of Cape   |                         |                  |
|                   | Town                 |                         |                  |