# I VERIFY HERE MY CURRICULUM VITAE

August 25, 2011

# 1 General information

Name	Mogese Wassaie
Sex	Male
Nationality	Ethiopian
Language	Amharic and English (Excellent in writing, speaking, listening and reading)
Religion	Orthodox christian
Date of Birth	19 FEB 83
e-mail	$timo_99@yahoo.com$
Telephone	(+251)918783735
Institutional address	Virtual and Real Physics Laboratory second floor , Room 2

# 2 General Educational Background

Year	Name of the academic Institution	Type of award	CGPA
1998 - 2000	Fasiledes General Secondary High School	E.S.L.C.E	3.64
2001 - 2002	Gondar Teacher's Training College	Diploma in PHYSICS	2.96
2004 - 2008	Addis Ababa University	B.Sc Degree in <b>PHYSICS</b>	3.15
2007 - 2008	Africa Virtual Unibversity	A+ core of Hardware maintenance	Certificate
2008 - 2009	Bahir Dar University	M.Sc in <i>SPACE</i> PHYSICS	3.54

# 3 General Work Experience

- 3.1 Teacher in High School in different regions of the Federal Republic of Ethiopia.
- 3.2 Technical assistant at the department of Physics Laboratory, Bahir Dar University, Ethiopia.
- 3.3 Washera GeoSpace and Radar Science Laboratory System Administrator, Bahir Dar University, Ethiopia.
- 3.4 System Administrator of Virtual Physics Laboratory, Bahir Dar University, Ethiopia.
- 3.5 Lecturer and Technical assistant at graduate school program in Computational Physics Bahir Dar University, Ethiopia.
- 3.6 E Learning Expert at Bahir Dar University, Ethiopia.

## 4 Abstract

My research presents the characteristics of the ionosphere over Bahir Dar  $(11.8^{o}N, 37.1^{o}E)$ . This is done by using ground-based GPS satellite receiver observations and the NeQuick model, which is an empirical model, driven by the flux of F10.7cm radiation for the corresponding dates. We have found out that this simple empirical model is capable of reproducing the observed TEC measurements during geomagnetic quite conditions. It is interesting to mention that the NeQuick model seems to get worse in reproducing the observed TEC when there is appreciable solar activities. The performance of the NeQuick model can be improved further by means of the data ingestion into it. We have observed that the TEC values varies substantially from season to season and the maximum value is observed during equinoctial months.

# 5 Research interest

- 5.1 Monitoring ionospheric TEC and Scintillation Using GPS and VHF receiver ground observed data over Ethiopia.
- 5.2 Monitoring Space Weather Effects on the magnetosphere-ionosphere system over Ethiopia during Solar cycle 27.
- 5.3 Validation of ionospheric parameters from local and global ionospheric models, ground observations and Satellite measurements.
- 5.4 Provide near real time TEC maps for application in communication and Civilian aviation.

# 6 Computer Skill

Computer language	Application software	Potential
Computer operating system	Window, Ubuntu linux and Mac OS	Excellent
Computer programming (Computing)	MATLAB	Excellent

# 7 Maintenance skill

Type	Specification	Efficiency
Computer	PC and Laptop Hardware	Excellent
Educational electronics apparatus	Power supply, oscilloscope, digital multi-meter and etc	Excellent

# 8 Reference

# 8.1 Dr. Baylie Damtie

(Supervisor)

#### Address:

- Bahir Dar, Bahir Dar University, Ethiopia, P.O.Box: 79
- e-mail: bayliedamtie@yahoo.com
- Phone: (+251-918340164)

#### Educational background and working experience

- PhD in Physics from University of Oulu, Finland, May 12, 2004.
- MSc in Physics from University of Tromsø, Norway, July 16, 1999.
- Adj. Professor of Physics, Addis Ababa University, Ethiopia: Sept. 2004-present.
- Ass. Professor of Physics, Bahir Dar University, Ethiopia: Sept. 2004-present.
- Research Scientist, University of Oulu, Finland: Apr. 2004-present.
- Researcher, University of Oulu, Finland: Jan. 2000-Apr. 2004.
- Researcher, EISCAT (European Incoherent SCATter) Radar data Laboratory, Finland: Sept. 1999–Dec. 1999.
- Research assistant, University of Tromsø, Norway, July 16, 1999-Aug. 1999.

# 8.2 Dr. Endawoke Yizengaw

(Co-supervisor)

### Address:

#### Institute for Scientific Research Boston collage

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## Educational background and working experience

- Senior Research Scientist, Boston Collage, ISR, Boston, Massachusetts (July 2009-present)
- Assistant Research Professor, (UCLA), IGPP, Los Angeles, California (July 2009-present)
- UCLA, IGPP, Los Angeles, California (May 2004-July 2006)
- Postdoctoral Researcher: At UCLA and JPL/NASA coordinated research project.
- Postdoctoral Advisor: Prof. Mark Moldwin
- La Trobe University, Melbourne, Australia (September 2000-May 2004).
- Postdoctoral research assistant: At the cooperative Research Center (CRC) for Satellite System research group, support form the commonwealth of Australia.
- PhD thesis Advisors: Prof Peter Dyson and Dr. Elizabeth Essex
- Course taught (Laboratory demonstration and tutorial): General Physics I and II
- Tromso University, Tromso, Norway (August 1996-September 2000).
- Graduate research Assistant
- MSc thesis Advisors: Prof Chris Hall and Prof Asgeir Brekke

## 8.3 Mr. Zinaye Tefera

#### Address:

- Bahir Dar, Bahir Dar University, Ethiopia, P.O.Box: 79
- e-mail: zinaye401@yahoo.com
- Phone: (+251-918760874)

#### Educational background and working experience

- MSc in Physics from Norwegian University of Science Technology (NTNU), sept 2003.
- B.Ed in Physics from Bahir Dar University, Ethiopia, Aug. 2000-Sept. 2003.
- Diploma in Physics from Bahir Dar Teachers Collage, Ethiopia, Dec. 1991.
- Senior lecturer at department of Physics in Bahir Dar University, Ethiopia, May 2005-present
- Department head of Physics at Bahir Dar University, Ethiopia, May 2005-present.
- Dean of students, Bahir Dar University: Dec. 2003-May 2005.