# Muthunama Gonnage Dinuni Kaushalya Fernando

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# Motivation

An enthusiastic, adaptive and fast-learning person with a broad and acute interest in the discovery of new innovative possibilities of research and out of box thinker, I particularly enjoy collaborating with researches from different disciplines to develop new skills and solve new challenges and a good team player.



### **Personal Details**

Age 24 years

Gender Female

Nationally Sri Lankan

NIC 887851913V

## **Education**

2009 - 2013 University of Colombo School of Computing, Sri Lanka

(B.Sc. (Hons) in Computer Science – To be completed by 2013 Dec)

(Current GPA 3.6862/4 - First class up to 3<sup>rd</sup> year results)

1993 – 2007 Holy Family Convent, Colombo 04

G.C.E (A/L) - 2008 (C.Maths - B, Physics - B, Chemistry - B, Zscore 1.8184)

G.C.E (O/L) – 2004 (8 A's- A for all subjects)

# **Research Experience**

#### 2012- 2013 Sustainable Computing Research Group (SCoRe)

### Wireless and Sensor Networking laboratory

Research Assistant – (full time)

#### **TikiriPower**

TikiriPower is an industry funded research project in Wireless Ad-hoc Sensor Network laboratory collaboration with "Orel Corporation". TikiriPower is a power monitoring and controlling mechanism uses sensor nodes for a smart home application which embeds sensor network for power monitoring optimizations.

### Co-operative Insurance - Security Audit

Junior Technical Security Auditor

### Ministry of Defense Sri Lanka - Nationals Peoples Registry Project

Junior Procurement Consultant

### 2013-present

### Mathematical modeling for real time radar in 3D maritime environment

This is the final year research project which combines variety of physics

theories and tries to capture a computational real time model

Project duration: 10 months

Project weight: 10 credits in the final year

## **Work Experience**

### 2012 Institute of Indigenous Medicine , University of Colombo

Visiting Lecturer

Lecture series on "Information Technology & Computer Application "course unit for 1st year undergraduates in both Department of Ayurveda and Department of Unani.

- Conducting lectures, tutorial classes, lab-sessions and in-class assignments for undergraduates
- Designing exam papers, tutorials, assignments and lab-sessions
- Marking exam papers and evaluating viva and assignments
- Exam invigilation

# **Project Experiences & Awards**

#### 2012 TrafficMate

TrafficMate is a traffic management app providing an efficient solution for traffic congestion. Research indicates the most effective ways of controlling traffic. TrafficMate takes advantage of the Smartphone inside the app user's pocket, turning the user into a sensor. Smartphone's create a 'social network' of traffic detection without external sensors or bureaucracy.

#### Awards

- World Summit Award 2012 Award Winner (<a href="http://www.wsa-mobile.org/winner/trafficmate-81120121016">http://www.wsa-mobile.org/winner/trafficmate-81120121016</a>).
- TrafficMate has been nominated for the World Summit Award (www.wsamobile.org) by Reshan Dewapura, WSAmobile Expert Panel Member 2012, as the best mContent example in mMedia & News from Sri Lanka. (http://www.icta.lk/success-stories.html).
- NBQSA 2012 (National Best Quality Software Awards) Silver award winner for tertiary category organized by BCS Sri Lanka section (http://www.nbqsasrilanka.org/winners\_2012)
- Nominated for Asia Pacific ICT Awards 2012 (APICTA 2012) which was held in Brunei Darussalam from 2nd to 5th December 2012.

### 2012 Calcey Hakathon\_ - Runner up

36 hour coding challenge among 6 leading universities in Sri Lanka

### **Publications**

2013

Authorship : First Author

Type of publication : Oral presentation at conference

Referred publication: Yes

Title : 3D Radar - Modeling Virtual Maritime Environment - For the

Static Environment Perception

Conference : International Conference on Robotics, Biomimetics, Intelligent

Computational Systems

Publisher : IEEE

Citation : Fernando, D. ; Kodikara, N.; Keppetiyagama, C., "3D Radar -

Modeling Virtual Maritime Environment - For the Static

Environment Perception",2013 International Conference on Robotics, Biomimetics, Intelligent Computational Systems,25-27 Nov. 2013(Accepted-In press)

2013

Authorship : First Author

Type of publication : Pending for acceptance

Yes

Referred publication: Mathematical Model for Radar in 3D Virtual Maritime

Title : Environment for the Dynamic Perception

Eighth International Conference on Industrial & Information

Conference : Systems 2013 (ICIIS- '2013)

**IEEE** 

Publisher : Fernando, D. ; Kodikara, N.; Keppetiyagama, C., " Mathematical

Citation : Model for Radar in 3D Virtual Maritime Environment for the

Dynamic Perception ",Eighth International Conference on Industrial & Information Systems 2013 (ICIIS-

'2013), Peradeniya, Sri Lanka, Dec. 2013.

**2013** Joint Author

Authorship : Pending for acceptance

Type of publication :  $\gamma_{es}$ 

Referred publication: An Intelligent Smart Building System for Energy Efficient

Title : Lighting Management.

Conference : Eighth International Conference on

Industrial & Information Systems 2013 (ICIIS- '2013)

Publisher : IEEE

Citation : Fernando, MAID., Sayakkara, A., Fernando, D., Siriwardena,

EMD.,Ekanayake, EMWV.,De Zoysa, K.,"An Intelligent Smart Building System for Energy Efficient Lighting Management", Eighth International Conference on Industrial & Information Systems 2013 (ICIIS- '2013),Peradeniya, Sri Lanka, Dec. 2013.

2012

Authorship : Joint Author

Type of publication : Oral presentation at conference

Yes

Yes

Referred publication: TikiriPower - Using TikiriDB abstraction on Smart Home

Title : systems

Advances in ICT for Emerging Regions (ICTer), 2012

Conference : International Conference

**IEEE** 

Publisher : Weerawarne, L.; Sayakkara, A.; Fernando, D.; Suduwella, C.;

Citation : De Zoysa, K., "TikiriPower - Using TikiriDBabstraction on

Smart Home systems," Advances in ICT for Emerging Regions (ICTer), 2012 International Conference on , vol., no., pp.75,81, 12-15 Dec. 2012 doi:10.1109/ICTer.2012.6422838 URL:http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnum

ber=6422838&is

2012

Authorship : Joint Author

Type of publication : Oral poster presentation at conference

Referred publication: Yes

Title : A sustainable mechanism for gathering road traffic data using

smart-phones

Conference : Advances in ICT for Emerging Regions (ICTer), 2012

**International Conference** 

**IEEE** 

Citation Udalagama, S.; Sahabandu, L.; Samarkoon, L.; **Fernando, D**.;

Chanthirasegaran, P.; Udana, S.; Asanga, D.; Fernando, C.; Keppetiyagama, C.; Ranasinghe, C., "A sustainable mechanism for gathering road traffic data using smart-phones,"Advances in ICT for Emerging Regions (ICTer), 2012 International Conference on , vol., no., pp.224,224, 12-15 Dec. 2012 doi:

10.1109/ICTer.2012.6423029

URL:http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnum

ber=6423029&isnumber=6421397

# Responsibilities

Publisher

**2012- Present** Chairperson IEEE UCSC Student Branch for 2012 – 2013

<sup>2010-2012</sup> IEEE Coordinator USCS Student Branch - 2010 to 2012

2010-Present IEEE student Member

2009-2013

A member of the Microsoft Student Champs community

2012- Present
IEEE Representative for CompSoc Society, University of Colombo

Advisor - UCSC Programming Competition

Main organizer and coordinator in IEEE Xtreme 6 - 24 hours

**Programming Competition** 

Served as a Judge and coordinator for IT quiz inter school IT

	competition organized by Holy Cross College IT club, Sri Lanka.
2012	Main organizer and coordinator in IEEE Xtreme 5 - 24 hours
2011	Programming Competition
	Main coordinator IEEE Region 10 Technical seminar on "Green
	Energy" held on Prof. V.K Samaranayake Auditorium, Sri Lanka.
2011	Organizing committee for Island wide Media competition
	organized by IEEE student branch collaboration with CompSoc in
	University of Colombo.
2011	Coordinated IEEE Robotics Guest Lecture series
2011	Coordinator for "Tech Talk" series organized collaboration with
	IEEE GOLD Sri Lanka as the "Step" event.
2009-2012	Active Committee member of Computer Society of University of
2011	Colombo
	Editor of University of Catholic Students Movement

### **Professional Affiliations**

- IEEE Student Member (MIEEE 91252315)
- Sun certified Programmer for the Java Platform, standard Edition 5.0
- Computer Application Assistant –National Vocational Qualification level 3
- Computer Graphic Designer National Vocational Qualification level 4

### Referees

Prof. N.D. Kodikara Gihan P. Senevirathne
Deputy Director Senior Lecturer, Head CIS

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Computing Computing

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I hereby certify that the above facts and detail furnished by me are true & correct to the best of my knowledge .

16/09/2013 Dinuni Fernando

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