

Ruwan Wickramarachchi

"Dilena", Pothuwila, Payagala

T.P: Mobile: +94 777 487727

Residence: +94 34 2233733

Email: rtwickramarachchi@gmail.com / ruwantw@ieee.org

Blog: <http://rtwick.wordpress.com>

Personal Information

Gender: Male

Date of Birth: 29th May 1988

Nationality: Sri Lankan

Age: 25 Years

Objective

To obtain a position where I get the opportunity to explore novel solutions in IT to benefit the organization and strengthen my abilities

Core Skills

I have an ability to analyze problems, identify core functionalities and provide modularized designs. I am self-motivated, goal-driven and have an ability to prioritize my work. I am a fast learner with good searching skills and ever ready to adapt to new technologies. I have a good understanding in core computer science concepts and have good communication, presentation and writing skills.

Education

- **Bachelor of Science in Computer Science** **2009- Present**
University of Colombo School of Computing (UCSC)
 - GPA: 3.3631 (As at August,2013)
- **GCE Advanced Level and Ordinary Level Examinations** **2002 - 2007**
Ananda College, Colombo
 - Advanced Level Examination -Results:
Physics: A Chemistry: B Combined Mathematics: C
Z-Score: 1.7628
 - Ordinary Level Examination - Results
9 'A' passes (including Mathematics, English and Science) and one 'C' pass for English Literature
- **Primary and Secondary Education**
 - C.W.W. Kannangara Central College, Mathugama.* **1999-2002**
 - K/Pothuwila Maha Vidyalaya, Payagala, Kalutara* **1994-2002**

Professional Qualifications

- Certificate in Business Accounting (CBA) offered by CIMA

Research Experiences

- **Final year individual research** **[Currently Underway]**
 - Dissertation: “*Species-specific primer design for unique identification of closely related species*”
 - Focused on the computational primer design and validation for Polymerase Chain Reaction (PCR) based experiments to uniquely identify closely related species (e.g. identification within the same gene family).
- **Research Assistant** **December 2012- February 2013**
Simulations and Research Group, University of Colombo School of Computing
 - Involved in developing a deployable version of *Vidusayura* ship simulation system by modularizing and restructuring the design architecture of the system. (<http://www.vidusayura.org>)
- **Research Assistant(Intern)** **April 2012 - October 2012**
Sri Lanka Navy – Research and Development Unit
Involved in following projects:
 - Project “Virtual Eye”:
Designed and developed a *virtual telescope* to mimic the functionalities of a real nautical telescope in real-time maritime simulation environments like *Vidusayura* (<http://www.vidusayura.org>).
 - Virtual 2D-Radar Coverage System:
Designed and developed a light-weight 2D-Radar coverage system which simulates the functionalities of actual marine radar in virtual ship simulation environments.
 - System Optimization of Vidusayura
Optimized the Vidusayura ship simulation system by eliminating the dependencies identified and re-engineering the graphic rendering, physics and networking modules

Publications

- Ranaweera, W., **Wickramarachchi, R.**, Jabbar, S., Weerasinghe, M., Gunathilake, N., Keppitiyagama, C., Sandaruwan, D., Samarasinghe, P. *Virtual Eye: Reflection of real world motion changes in a virtual world with the use of sensor based mobile viewer*. 30th National Information Technology Conference (NITC 2012), in Sri Lanka, ISBN: 978-955-9155-20-1.

- Ranaweera, W., **Wickramarachchi, R.**, Jabbar, S., Weerasinghe, M., Gunathilake, N., Keppitiyagama, C., Sandaruwan, D., Samarasinghe, P., *Virtual Eye: A sensor based mobile viewer to aid collaborative decision making in virtual environments*, International Conference on Advances in ICT for Emerging Regions (ICTer-2012) , Sri Lanka
- Ranaweera, W., Jabbar, S., **Wickramarachchi, R.**, Weerasinghe, M., Gunathilake, N., Keppitiyagama, C., Sandaruwan, D., Samarasinghe, P., *A Lightweight Approach to Simulate a 2D Radar Coverage for Virtual Maritime Environments*, 8th International Conference on Computer Science & Education (ICCSE 2013), Sri Lanka
- **Wickramarachchi, R.**, Keppitiyagama, C., Clock Synchronization in Wireless and Sensor Networks: A survey, 2012 (Unpublished)

Project Experiences

- Involved in developing Document management System for Medical Faculty, University of Colombo [Wordpress, MySQL, PHP]. Project is hosted at: <http://dms.med.cmb.ac.lk>
- Involved in developing the main website for National Institute of Social Development (NISD) [Joomla,PHP,MySQL]. Project is hosted at: <http://www.nisd.lk>
- Leader of the Rapid Application Development Group Project: Developed the main web portal (*Joomla*), Learning Management System (*Moodle*) and the Alumni society web site (*PHP*) for the Department of Economics, University of Colombo.
- Developed a web based resource management system for UCSC as the group project for Internet Programming in 2nd year.(PHP, MySQL, AJAX, JavaScript)
- Developed a software in python to demonstrate numerical methods, root finding techniques and point interpolation/extrapolation as a group project for Numerical Computing in 2nd year.(wxPython, python, Sage)

Extra-Curricular Activities

- **As an undergraduate:**
 - A Student Member of Institute of Electronics and Electrical Engineers(IEEE) and the Membership Coordinator at IEEE Student Branch, UCSC
 - An Active member of Computer Society of University of Colombo
 - Taken part in IEEE Xstream 5.0, a 24 hour Programming Competition organized by IEEE
 - Participated in Imagine Cup 2010 competition under Software Development category
 - Was a resource person in Radio Program “*Internet Sampath Bhawithaya*” broadcasted on Sri Lanka Broadcasting Corporation (SLBC)
 - An exhibitor and organizer(Cyber Crimes & Digital Forensic stall) at IFO++ Exhibition organized by UCSC
 - A Microsoft Student Champ

- **As a student at Ananda College, Colombo :**

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| • Vice President of Physics Club | 2006-2007 |
| • Senior Committee Member of Science Union | 2006-2007 |
| • An active member of English Literary Union | 2005-2007 |
| • An active member of Photographic Society | 2005-2007 |
| • An active member of Organization against Smoking and Drug addiction | 2003-2005 |

Interests

- I have an interest in Information Retrieval, Pattern Recognition and Machine Learning.
- I am also interested in search space optimization algorithms inspired by natural intelligence (e.g. Swarm Intelligence and Genetic Algorithms)
- I love to search new dimensions in Ubiquitous Computing which study the human interaction and the enhancement of human perception.

Professional Skills

- C,C++,C#, Java, Python, wxPython, Assembly x86 programming
- PHP programming, MySQL
- Socket Programming(Both in Linux environments and WinSock API)
- Working with Protocols like SSH and SCP in Linux based web servers
- Android programming with Android SDK,API Level 10
- Microsoft .Net Framework 3.5
- Working with IDEs like Microsoft Visual Studio 2008, Eclipse, Netbeans.
- Sage Open Source mathematical Software

Referees

Dr.Chamath Keppitiyagama,
Senior Lecturer,
University of Colombo School of Computing,
No.35, Reid Avenue,
Colombo 07.
Email: cik@ucsc.cmb.ac.lk/
chamath@ucsc.cmb.ac.lk

Dr.Prasad Wimalaratne,
Senior Lecturer,
University of Colombo School of Computing,
No.35, Reid Avenue,
Colombo 07.
Email: spw@ucsc.cmb.ac.lk
T.P: +94 11 2581245