

## Yasanka Sameera Horawalavithana

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**OBJECTIVE** My goal is to become a specialized person in research & academia. To me, research is often a bridge to an ambitious goal - a bridge that needs to be crossed in steps. I tend to work on projects that try to bring cutting-edge research ideas to mainstream practice. To uplift and share my knowledge, I would like to apply for your position in the academia.

**EDUCATION** *Bachelor of Science (Hons), Computer Science (First class)*  
**University of Colombo School of Computing**, Sri Lanka Graduated June 2015,  
GPA: 3.84/4 Ranked among Top 2 % graduates in the university convocation.

*Exchange Student, Computer Science*  
**Umea University**, Sweden August 2013 - February 2014

*Advanced Level Mathematical Stream*  
**Ananda College**, Sri Lanka August 2006 - August 2009

**PUBLICATIONS** *Workshop papers:* Y. S. Horawalavithana and D. N. Ranasinghe. 2015. An Efficient Incremental Indexing Mechanism for Extracting Top-k Representative Queries Over Continuous Data-streams. In Proceedings of the 14th International Workshop on Adaptive and Reflective Middleware (ARM 2015). ACM, New York, NY, USA, , Article 8 , 3 pages. DOI=<http://dx.doi.org/10.1145/2834965.2834975>

*Posters:* Y.S.Horawalavithana, D.N. Ranasinghe. An Efficient Pub/sub model for Extracting Top-k Representative Queries Over Continuous Data-streams, 8<sup>th</sup> International Conference on Similarity Search and Applications Bristol,UK, October 2015.

*Technical Reports:* Y.S.Horawalavithana, D.N. Ranasinghe. Cloud based pub/sub model for Top-k matching over continuous data-streams (Undergraduate Thesis) January 2015

*Literature Review:* Y.S.Horawalavithana, D.N. Ranasinghe. Distributed Software Transactional Memory (Technical Article: Literature review) January 2014.

**PROJECTS** *Research Project:* We formalize a variation of continuous k-diversity problem by reducing to the independent dominating set problem in graph theory, which is NP-hard. An incremental indexing mechanism is proposed for handling streaming publications that is based on Locality Sensitive Hashing (LSH) to diversify Top-k results continuously.

*Course-work Assignment:* GCOM is a middleware for group communication in Distributed Systems. The middleware implemented an API that in turn can be used by programmers to develop applications that make use of reliable messaging. GCOM supported various types of multicast, guarantee causal message ordering and handle group membership issues.

**WORK  
EXPERIENCE**

*Software Engineer (Data & Analytics)* Feb 2015 - July 2016  
Cake (Pvt) Ltd. 101 Redwood Shores Pkwy, Redwood City, CA 94065, US

*Guest Lecturer (Distributed System)* June 2015, 2016  
University of Colombo School of Computing, 35, Reid Avenue, Colombo 7, SL

**VOLUNTEER  
ACTIVITIES**

- **Visiting Researcher** at University of Colombo, School of Computing, Sri Lanka specializing at Distributed Systems, working together with Dr. D.N. Ranasinghe
- **Mentor** at Google Summer of Code 2015 and 2016, Google Code-in 2015 representing the Sustainable Computing Research Group (SCoRe) - research lab affiliated with University of Colombo School of Computing, Sri Lanka
- **ACM Professional Member** and ACM Ambassador for student recruitments
- **Resource person** at weekly radio program Internet Sampath Bhaawithaya broadcast at Sri Lanka Radio Corporation in 2010/11

**AWARDS &  
HONORS**

**Best Undergraduate Thesis:** University Gold Medal and CINTEC Award for the Best Computer Science Undergraduate Thesis/Project at year 2014, awarded at University convocation 20th July, 2015

- Achieved 3rd place at Nordic Collegiate Programming Contest 2013 (Umea region) representing Umea university
- 2nd Runner up at Information Security Quiz organized by SL CERT — CC 2014
- Participant at IEEE Extreme international coding competition 2012 & 2013 representing University of Colombo
- Team member of the winning team at All Island Inter School Chemistry Quiz Competition 2008/09 organized by Institute of Chemistry Ceylon
- All island medalist at the award ceremony Sisu Diriya Thilina Pranama organized by Ministry of Transport, Government of Sri Lanka in 2006.
- Finalist in best secretary category at Inter school Junior Entrepreneurship program organized by Young Entrepreneurs Sri Lanka (YESL) 2009

**DECLARATION** I hereby declare that the above written particulars are true to the best of my knowledge and belief & below referees can be contacted to get further information.

*Dr. D.N. Ranasinghe,* Senior Lecturer Gr. I,  
University of Colombo School of Computing, 35, Reid Avenue, Colombo 7, SL, mail:  
dnr@ucsc.cmb.ac.lk

*Prof. Frank Drewes,* Director of Studies,  
Umea University, Sweden, SE-901 87, Umea, Sweden, mail: drewes@cs.umu.se