

**PROCEEDINGS OF THE
CSE SYMPOSIUM 2017**

Organized By
Department of Computer Science and Engineering
Faculty of Engineering
University of Moratuwa
Sri Lanka

December, 2017



Editorial

We are delighted today to present the proceedings of CSE Symposium 2017, the annual research symposium of the Department of Computer Science & Engineering (CSE), University of Moratuwa.

CSE Symposium 2017 has given the opportunity to the undergraduates of CSE of the cohort 2013 to publish and present their individual project carried out as part of the module CS3202 Software Engineering Project, in 2016. We received 100 submissions, which initially went through the editorial review that resulted in 54 submissions qualifying for the review process. These 54 papers were subjected to a stringent, two-part, double blind review process, first by the Editors and then by eminent group of reviewers; 19 high quality papers were selected for the final program resulting in a competitive acceptance rate of 19% for this year.

We appreciate the hard work put by every student in their software engineering projects and for compiling a set of high quality scholarly articles. We believe the papers included in this proceeding convey the essence of innovative, high impact and research led development projects carried out by CSE undergraduates during their Semester 5 academic activities.

While there are 19 research papers present unique work carried out by respective authors, we see three major themes of system development: web solutions, mobile solutions and standalone applications are contributed as the outcome of these projects. The papers can be broadly grouped into the following due to their relevance:

The papers *Kitchen Hunt: Recipe Search by Ingredients you have in your Kitchen* and *Foody: Food Community and Eating Pattern Tracker* presents systems developed in the domains of culinary arts and dietary sciences.

READ: Moodle Reading Assistant, Mathematical expression input tool with LaTeX Support, and Automated programming assignment grading system are three papers representing work related to e-Learning and e-assessment.

Transportation, travel and tourism are the focused domains of the papers: *Taxi Master: The Smart Solution For Taxi Service Industry, Tour Genie-Tourist Guide Application, and Tour Me.*

The papers titled *Migraine Trigger Recorder: A Migraine Tracker, My Child : Persuasive Mobile Based Approach to Enhance Children's Health and Wellbeing, and We Care : Online Disease Tracker System* present the projects carried out for developing systems in the healthcare domain.

Information Systems for Small-scale Garment Industries, Quota: Wifi Data Managing and Costing System, and The Game Point Tournament Management System are developed focusing backend operations with efforts to resource allocation and optimization.

Book Portal Operations Management System, and E-commerce solution for Cake Shop are two papers that present work carried out in the domain of user managed e-business solutions for two unique business cases.

HackOverflow, The IT Communication Hub, VMS – Virtual Meeting System, and Instant Messenger Plus Chat and voice calling application are enhanced solutions for facilitating user communication and idea sharing for different use cases.

We would like to extend our sincere appreciation towards many people who made the CSE Symposium 2017 a success and these proceedings possible. A special thank goes to the Head of the department and the academic staff of CSE for their efforts in developing student skills for research based learning. The support given by the external reviewers enabled us witnessing a fully-fledged symposium with high quality research work being presented. The members of the programme committee and the organizing committee of CSE Symposium 2017 did their best efforts to make this great event possible; a big thank to every one of you!

We wish the authors all the best for their future research and academic work while looking forward to another great CSE Symposium in 2018.

The Editors,
CSE Symposium 2017
December 2017

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