

Editor in Chief

Fergyanto E. Gunawan

Associate Editors

Satryo Soemantri Brodjonegoro, Institut Teknologi Bandung, Bandung, Indonesia Ngoc Thank Nguyen, Wroclaw University of Technology, Wroclaw, Poland Hiroomi Homma, Toyohashi University of Technology, Japan Yasuhiro Kanto, Ibaraki University, Japan

Executive Editors

Arta Moro Sundjaja Noerlina

Language Editors and Setters

Karen Phang Dina Nurfitria Holil Atmawati

Secretariat

Haryo Sutanto Eka Yanti Pangputri

Aims and Scope

Journal of Communication and Information Technology (CommIT) focuses on various issues spanning: software engineering, mobile technology and applications, robotics, database system, information engineering, artificial intelligent, interactive multimedia, computer networking, information system audit, accounting information system, information technology investment, information system development methodology, strategic information system (business intelligence, decision support system, executive information system, enterprise system, knowledge management), e-learning, and e-business (e-health, e-commerce, e-supply chain management, e-customer relationship management, e-marketing, and e-government). The journal is published in affiliation with the Research and Technology Transfer Office (RTTO), Bina Nusantara University, Jl. Kebon Jeruk Raya no. 27, Jakarta 11530, Indonesia.

Publications

CommIT Journal (ISSN 1979-2484) is published binually by the Research and Technology Transfer Office (RTTO) Bina Nusantara University at Kampus Anggrek, Jl. Kebon Jeruk Raya No. 27, Kemanggisan/Palmerah, Jakarta Barat 11530, telp. (021) 5327630, ext. 1708, e-Mail: hsutanto@binus.edu.

Home page: http://journal.binus.ac.id/index.php/commit http://research.binus.ac.id/journal/commit/ http://journal.binus.ac.id/index.php/commit



Contents

45-49
51-57
59-65
67-72
73-82
83-90
91-94