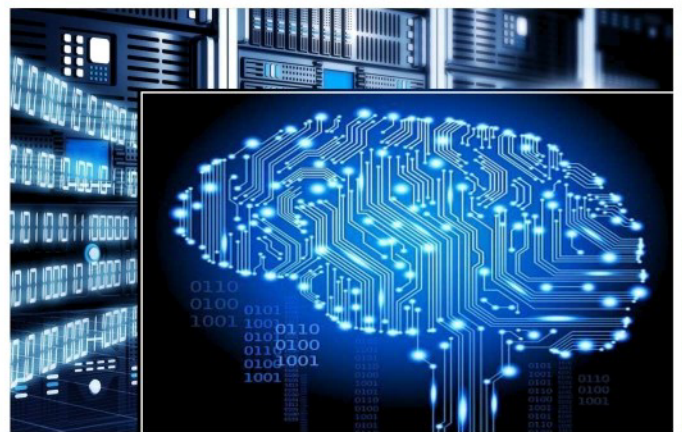
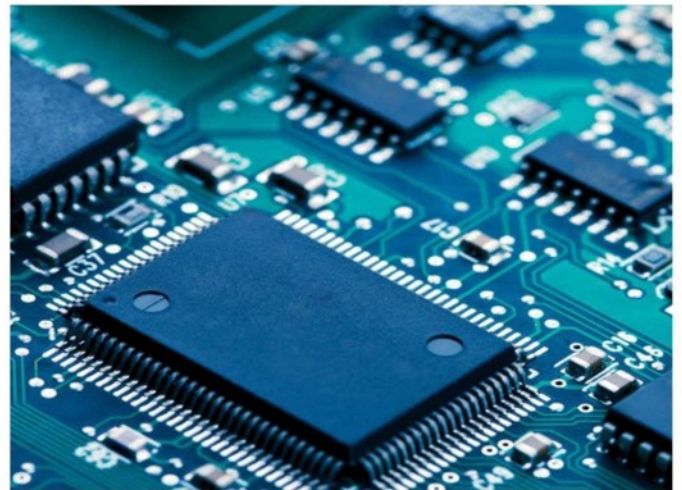
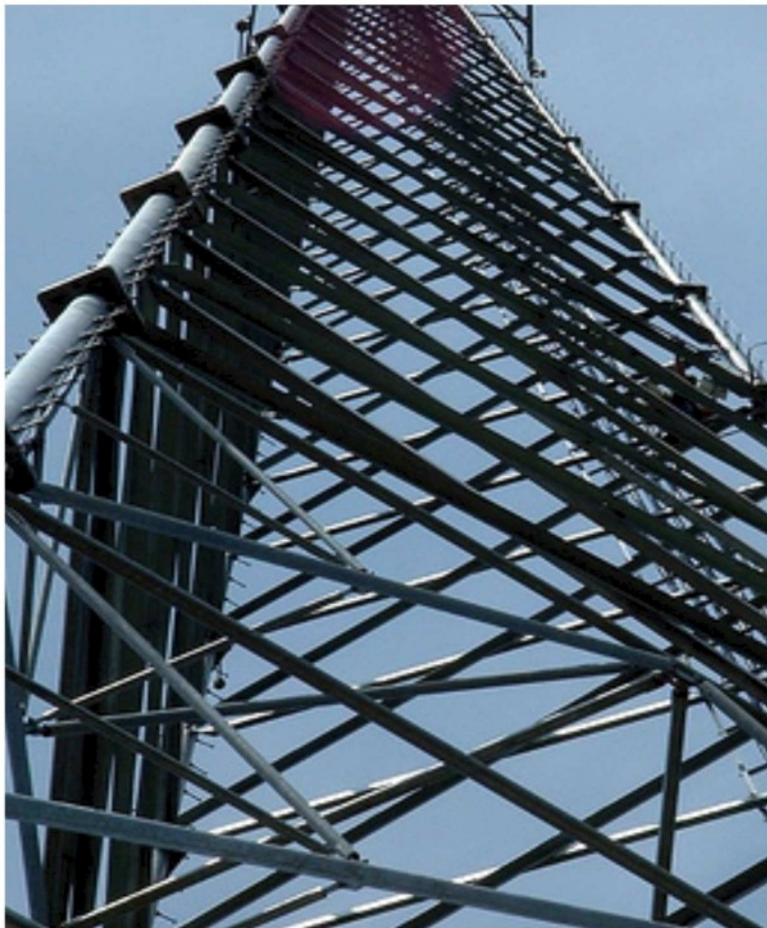


JURNAL INFOTEL

INFORMATICS TELECOMMUNICATION ELECTRONICS

Volume 15, Number 2, Mei 2023



Lembaga Penelitian dan Pengabdian Masyarakat
Institut Teknologi Telkom Purwokerto



JURNAL INFOTEL
Informatics, Telecommunication, and Electronics
 Volume 15, Number 2, Mei 2023

DESCRIPTION AND POLICY

About Jurnal INFOTEL

Jurnal INFOTEL is a scientific journal published by Lembaga Penelitian dan Pengabdian Masyarakat (LPPM) of Institut Teknologi Telkom Purwokerto, Indonesia. It was firstly published in 2009 for a printed version and for online version in 2012. The aims of Jurnal INFOTEL are to disseminate research results and to improve the productivity of scientific publications. Jurnal INFOTEL is published quarterly in February, May, August, and November. **Starting in 2018, Jurnal INFOTEL uses English as the primary language.**

Focus and Scope

Jurnal INFOTEL covers the field of informatics, telecommunications, and electronics. We receive **original research articles and any review papers**. Jurnal INFOTEL is published quarterly in **February, May, August and November** with the scopes and focus of the research areas that are:

Informatics: including Software Engineering, Information Technology, Information System, Data Mining, Multimedia, Mobile Programming, Artificial Intelligence, Computer Graphic, Computer Vision, Augmented/Virtual Reality, Games Programming.

Telecommunications: including Modulation and Signal Processing, Information Theory and Coding, Antenna and Wave Propagation, Wireless and Mobile Communication, Radio Communication, Satellite Communication, Fiber Optic, Network, and System.

Electronic: including Microelectronic System, VLSI Design, Biomedical Instrument, Embedded System, Robotic, Communication Electronic, Optoelectronic, Internet of Things, Analogue and Digital Control, Intelligent Control, Adaptive System, System Identification.

Peer Review Policy

Each article that goes to the editor will be selected in advance on the scope and feasibility by the editorial board. Then, the articles will be sent to peer reviewer and will go to the next selection by **Blind Preview Process**. Reviewers do not know the identity of the authors, and authors do not know the identity of reviewers either. Each submitted paper will be reviewed by at least two peer-reviewers. After that, the articles will be returned to the authors to revise. The reviewing process will consider novelty, objectives, method, scientific impact, conclusion, and references.

Open Access Policy

This journal is an open access journal which provides free access to the full text of all published articles without charging readers or their institutions for access. Readers have the right to read, download, copy, distribute, print, search, or link to the full texts of all articles in Jurnal INFOTEL. This journal provides immediate open access to its content on the principle that makes the research freely available to the public supports a greater global exchange of knowledge.

Registration Process

Due to security issues, the registration process in Jurnal INFOTEL is conducted by sending author's data such as full name and academic degree, email, and institutional affiliation to email **infotel@st3telkom.ac.id**. Author's account will be created by Admin. Account details, namely username and password, will be sent to Authors. The Authors, then are welcomed to submit their paper(s) afterward.

Online Submission

If you have already got the Username/Password for Jurnal INFOTEL, go to log in at:
<http://ejournal.st3telkom.ac.id/index.php/infotel/login>

Copyediting and Proofreading

All accepted papers will be checked with Copyediting and Proofreading process. We also use Grammarly application to improve the grammar quality of the articles.

Accreditation

Jurnal INFOTEL has been accredited by Ministry of Research, Technology and Higher Education as an online Scientific journal in Indonesia with accreditation number: 200/M/KPT/2020, December 23, 2020.

Indexing

Jurnal INFOTEL has been listed and indexed by Google Scholar, Open academic journals index, Crossref, ResearchBib, Bielefeld Academic Search Engine (BASE), ROAD: The Directory

of Open Access Scholarly Resources, Directory of Open Access Journal (DOAJ), Neliti, Indonesia One Search, Garba Rujukan Digital (Garuda), Science and Technology Index (SINTA), Index Copernicus International (ICI).

Mailing Address

Jurnal INFOTEL office:

Lembaga Penelitian dan Pengabdian Masyarakat (LPPM) Institut Teknologi Telkom Purwokerto (IT Telkom Purwokerto)

D.I Panjaitan Street No. 128 Purwokerto, Indonesia

Telp. 0281-641629

Email: infotel@st3telkom.ac.id

Website:

<http://ejournal.st3telkom.ac.id/index.php/infotel>

JURNAL INFOTEL
Informatics, Telecommunication, and Electronics
Volume 15, Number 1, Februari 2023

Publisher

Lembaga Penelitian dan Pengabdian Masyarakat (LPPM)
Institut Teknologi Telkom Purwokerto

Editor-in-Chief

Eko Fajar Cahyadi (Indonesia)

Advisory Board

Adiwijaya (Indonesia)
Khoirul Anwar (Indonesia)

Associate Editor

Huynh Thi Thanh Binh (Vietnam)	Syifaul Fuada (Indonesia)
Kurnianingsih (Indonesia)	Ilham Ari Elbaith Zaeni (Indonesia)
Hendriyawan Achmad (Indonesia)	Ari Fadli (Indonesia)

Editorial Board

Anton Satria Prabuwono (Saudi Arabia)	Aedah Abd Rahman (Malaysia)
Leonel Hernandez (Columbia)	Vincent Omollo N (Kenya)
Huynh Thi Thanh Binh (Vietnam)	Alfin Hikmaturokhman (Indonesia)
Filbert H. Juwono (Malaysia)	Heri Nurdiyanto (Indonesia)
Filbert H. Juwono (Malaysia)	Janner Simarmata (Indonesia)
Anggun Fitriani Isnawati (Indonesia)	Ari Fadli (Indonesia)
Andri Pranolo (Indonesia)	Tenia Wahyuningrum (Indonesia)
Yessi Jusman (Indonesia)	Wahyu Pamungkas (Indonesia)

Managing Editor

Bitu Parga Zen (Indonesia)
Iqsyahiro Kresna A (Indonesia)
Nur Ghaniaviyanto Ramadhan (Indonesia)
Rahmat Widadi (Indonesia)

Copyeditor

Jans Hendry
Kholidiyah Masykuroh
Faisal Dharma Adhinata

Diandra Chika Fransisca
Petrus Kerowe Goran

Layout Editor

Utti Marina
Utti Marina Rifanti
Fauza Khair
Agi Prasetiadi

IT Support

Gunawan Wibisono

JURNAL INFOTEL
Informatics, Telecommunication, and Electronics
Volume 15, Number 2, Mei 2023

PREFACE FROM EDITOR-IN-CHIEF

Jurnal INFOTEL is a scientific journal published by Lembaga Penelitian dan Pengabdian Masyarakat (LPPM) of Institut Teknologi Telkom Purwokerto, Indonesia. It covers the field of Informatics, Telecommunications, and Electronics. The aims of Jurnal INFOTEL are to disseminate research results and to improve the productivity of scientific publications. Starting in Volume 10 Number 1, 2018, Jurnal INFOTEL uses English as the primary language.

Jurnal INFOTEL is indexed by national and international indexer such as Neliti, Indonesia One Search, Garba Rujukan Digital (Garuda), Science and Technology Index (SINTA), Google Scholar, Open academic journals index, Crossref, ResearchBib, Bielefeld Academic Search Engine (BASE), ROAD: The Directory of Open Access Scholarly Resources, Directory of Open Access Journal (DOAJ), Index Copernicus International (ICI).

In this issue, 13 papers are published by ... authors from ... countries. Four papers related to Informatics topics, seven papers related to Telecommunication topics, and four papers is about Electronics topic.

We would like to thank our Associate Editors, Editorial Boards, Reviewers, and Authors. We hope that Jurnal INFOTEL can contribute to the progress of scientific publications in Indonesia and in the world.

Purwokerto, Mei 2023

Editor-in-Chief

JURNAL INFOTEL
Informatics, Telecommunication, and Electronics
 Volume 15, Number 2 Mei 2023

TABLE OF CONTENT

Description and Policy.....	i
Editorial Board.....	iii
Preface from Editor-in-Chief	v
Table of Content.....	vi
Improved vanishing point reference detection to early detect and track distant oncoming vehicles for adaptive traffic light signaling Syahbana Politeknik Caltex Riau, Indonesia Dodi Zulherman Gifu University, Japan Yokota Yasunari Gifu University, Japan	121-129
Indonesian news classification application with named entity recognition approach Nurchim Nurchim Universitas Duta Bangsa Surakarta, Indonesia Nurmalitasari Nurmalitasari Universitas Duta Bangsa Surakarta, Indonesia Zalizah Awang Long Universiti Kuala Lumpur, Malaysia	130-134
Prediction model with artificial neural network for tidal flood events in the coastal area of bandar lampung City Eka Suci Puspita Wulandari Institut Informatika dan Bisnis Darmajaya, Indonesia Ramadhan Nurpambudi Institut Informatika dan Bisnis Darmajaya, Indonesia RZ. Abdul Aziz Institut Informatika dan Bisnis Darmajaya, Indonesia	135-149
Multi-industry stock forecasting using GRU-LSTM deep transfer learning method Ezra Julang Prasetyo Universitas Kristen Satya Wacana, Indonesia Kristoko Dwi Hartomo Universitas Kristen Satya Wacana, Indonesia	150-163
Static and dynamic human activity recognition with VGG-16 pre-trained CNN model Mawaddah Harahap Univeristas Prima Indonesia, Indonesia Valentino Damar Universitas Prima Indonesia, Indonesia Sallyana Yek Universitas Prima Indonesia, Indonesia Michael Michael Universitas Prima Indonesia, Indonesia M. Ridha Putra Universitas Prima Indonesia, Indonesia	164-168
Internet of things for monitoring parking system using optical character recognition Dona Yuliawati Institut Informatika dan Bisnis Darmajaya, Indonesia Rio Kurniawan Institut Informatika dan Bisnis Darmajaya, Indonesia Bayu Nugroho Institut Informatika dan Bisnis Darmajaya, Indonesia Suhendro Yusuf Irianto Institut Informatika dan Bisnis Darmajaya, Indonesia Sri Karnila Institut Informatika dan Bisnis Darmajaya, Indonesia	169-174
Implementation of Multiple Linear Regression to Estimate Profit on Sales of Screen Printing Equipment Khairul Khairul Universitas Pembangunan Panca Budi, Medan, Indonesia Asyahri Hadi Nasyuha Universitas Teknologi Digital Indonesia Ali Ikhwan Universitas Islam Negeri Sumatera Utara, Indonesia Moustafa H. Aly Technology and Maritime Transport, Alamein, Egypt Ahyanuardi Ahyanuardi Universitas Negeri Padang, Indonesia	175-181
Fatigue detection using decision tree method based on PPG signal Ilham Ari Elbaith Zaeni Universitas Negeri Malang, Indonesia	

Arya Kusuma Wardhana Universitas Negeri Malang, Indonesia Erianto Fanani Universitas Negeri Malang, Indonesia	182-187
Prototype of cascade level and flow control system on steam drum based on IoT	
Astrie Kusuma Dewi Politeknik Energi Dan Mineral Akamigas, Indonesia Andhika Darussalam Politeknik Energi Dan Mineral Akamigas, Indonesia Pujianto Pujianto Politeknik Energi Dan Mineral Akamigas, Indonesia Chalidia Nurin Hamdani Politeknik Energi Dan Mineral Akamigas, Indonesia Natasya Aisah Septiani Politeknik Energi Dan Mineral Akamigas, Indonesia	188-194
A Fire suppression monitoring system for smart building	
I Ketut Agung Enriko Institut Teknologi Telkom Purwokerto, Indonesia Angela Niarapika Nababan Institut Teknologi Telkom Purwokerto, Indonesia Adian Fatchur Rochim Universitas Diponegoro, Indonesia Sri Kuntadi PT. Telkom Indonesia	195-200
A virtual cage for monitoring system semi-intensive livestock's using wireless sensor network and Haversine method	
Fahmi Danah Pratama Telkom University, Indonesia Giva Andriana Mutiara Telkom University, Indonesia Lisda Meisaroh Telkom University, Indonesia	201-208
Monitoring of three-phase distribution power transformer based on the Internet of Things (IoT) and SCADA	
Yusnan Badruzzaman Politeknik Negeri Semarang, Indonesia Revi Alvin Razaqi PT. PLN (Persero) ULP Rambipuji, Indonesia	209-217
Peer Review Acknowledgement	vii
Guidelines for Author	ix