



CONFERENCE PROCEEDINGS
ABSTRACTS
ICSGT 2018

STATE POLYTECHNIC OF MALANG

Malang, 27-28 August, 2018

Organized by:



In Association with:



**ORGANIZING COMMITTEE
INTERNATIONAL CONFERENCE ON SMART GREEN
TECHNOLOGY (ICSGT) 2018**

Director	: Drs. Awan Setiawan, M MT, MM
Advisors	: Supriatna Adhisuwignyo, ST, MT Drs. Halid Hasan, MStratHRM Dr. Eng. Anggit Murdani, ST, M.Eng. Dr. Luchis Rubianto, LRSC, MMT
Conference Chair	: Dr. Ir. Bambang Sugiyono Agus Purwono, M Sc
Vice Conference Chair	: Drs. Masroni, MM
Conference Secretary	: Dr. Drs. Nur Salam, M Pd Drs. Rahbini, MT
Treasurers	: Frinta Pratamasari, SE Feronika Wijayanti, MM
Members	: Dr. Wirawan, B Eng (HONS), MT Dr. Moechammad Sarosa, Dipl. Ing. MT Dr. Ratih Indri Hapsari, ST, MT, Ph D Dr. Achmad Zaini, SE, MM Dr. Hilda Cahyani, SS, MPd, Ph D Dr. Drs. Mohammad Maskan, MSi Erfan Rohadi, ST, MEng, PhD Indrazno Siradjuddin, ST, MT, Ph D
Editors	: Supriatna Adhisuwignyo, ST, MT Drs. Masroni, MM Dr. Luchis Rubianto, LRSC, MMT Dr. Ir. Bambang Sugiyono Agus Purwono, M Sc



PREFACE
CONFERENCE CHAIR OF ICSGT 2018
STATE POLYTECHNIC OF MALANG

It is a big pleasure to me on behalf of the Organizing Committee of a two-day International Conference of Smart Green Technology (ICSGT) to welcome all the delegates and participants of this conference held in Malang city – the flower city.

As stated in the title, the scope of the conference covers about developing technologies for the smart living, which in fact, requires many disciplines that constitute engineering as a whole and united field.

We are whole-heartedly knowledgeable that differs from academic fields and industry professionals, this conference may also give opportunities to under and post graduate students and research scholars alike to take an active part and present research papers.

By doing so, they will not only gain greater insight into their discipline, but also contribute to the existing body of knowledge in that domain.

I am certain that the conference will prove to be a healthy point of academic interaction and so the students and faculty members as well will not only give but also benefit and draw inspiration from the talks and presentations from the distinguished guests.

Malang, August 27, 2018

Bambang Sugiyono Agus Purwono



FOREWORD
DIRECTOR OF STATE POLYTECHNIC OF MALANG

It is our great pleasure to welcome all participants, guests, keynote speakers, and presenters at this conference which is organized by the State Polytechnic of Malang.

The International Conference of Smart Green Technology 2018 (ICSGT 2018) provides a setting for discussing recent developments in a wide variety of topics of green technologies.

The conference particularly encouraged the interaction of research students and scholars with the more established academic community to present and to discuss new and current works. I believe that this conference will be a momentum to stimulate further study and research in all topics related to the green technology developments.

I would like to express my deep appreciation to keynote speakers for the efforts to present the ideas and methods in a lively and accessible way.

I would like to thank those who have responded to our call to take part and to contribute to this conference. We have a big hope that all of you enjoy, and get more knowledge and fruitful experience through the conference.

Finally, but not least, support and efforts from the conference organizing committee were absolutely essential to this conference. Therefore, I would like to acknowledge my sincere thanks to the conference organizing committee.

Malang, August 27, 2018

Awan Setiawan

TABLE OF CONTENT

Title	Page
Cover	i
Organizing committee	ii
Preface	iii
Foreword	iv
Table of Content	v
Appendix	100

Keynote speakers

Title	Page
[ABS-4] Welding Characteristics of Titanium Alloys <i>Tim Pasang, Mana Aziziderouei, Yuan Tao</i>	1.
[ABS-11] Innovative Approaches to Marine Antifouling <i>Vesna Lavtizara, Hideo Okamurab</i>	2.
[ABS-53] Zinc Ferrite-Based Nanocomposites and Their Photocatalytic Applications <i>Marjorie Lara Baynosa, Amr Hussein Mady, and Jae-Jin Shim</i>	3.
[ABS-47] Nano-enabled Membranes Technology: The Way Forward for Sustainable Water Treatment Solution <i>Ahmad Fauzi Ismail</i>	4.
[ABS-99] Elastic WLAN System - Challenge for Energy-Saving and High-Performance Wireless Networks <i>Nobuo Funabiki</i>	5.

Invited Speakers

Title	Page
[ABS-2] Effect of Heat Treatment on Drillability of Titanium Alloy 6Al-2Sn-4Zr-6Mo <i>Mahros Darsin, Timotius Pasang, Zhan Chen</i>	6.
[ABS-7] Analysis Stress and Displacement Cement Composites of 3-Axial Force Effect on Turning Process Alumunium 6061 <i>Santoso Mulyadi, Triwahju Hardianto, Yuni Hermawan, Dwi Djumhariyanto, Robertus Sidartawan</i>	7.
[ABS-9] Development of Slope Handling Guidelines in Arjasa, Jember Regency <i>Rahman Anda, Farid Makruf</i>	8.
[ABS-16] Maintenance of Centrifugal Pump with Reliability, Availabilty, Maintainability and Safety (RAMS) Method and Simulating Operating Characteristic Curve <i>Tri Suharno, Bambang Sugiyono Agus Purwono</i>	9.
[ABS-22] Optimization of Hybrid Powered Refrigerator System (Solar Cell Plus Diesel Engine) for Traditional Fishing Vessels in Makassar. <i>Soetyono Iskandar, Moch. Bruri Triyono, Nurlaela Latief, A. Muh. Idkhan</i>	10.
[ABS-28] Effect Frequency Ultrasonic Vibration on Double Pipe Heat Exchanger at Cooling Process <i>Sudarmadji, Bambang Sugiyono Agus Purwono, Santoso</i>	11.
ABS-29] Analysis and Design of Bus Chair for Economic Class Using Ergonomic Function Deployment (EFD) Method <i>Robertoes Koekoeh Koentjoro Wibowo, Siswoyo Soekarno, Ahmad Syuhri, Dwi Devi Fayendra</i>	12.
[ABS-32] Monitoring System and Control of Electric Vehicle of Jember University Based on Radio Frequency <i>Bambang Sujanarko, Fajar Kurniawan, Moch. Hasan, Widyono Hadi, Samsul Arifin, Devita Ayu Larasati, Nita Kuswardhani</i>	13.
[ABS-36] Object Tracking on Semi-Automatic Surveillance Camera Using Image Processing Based on Mean-Shift Method <i>Catur Suko Sarwono, Faiq Aprilian Romzi, Khairul Anam, Bambang Sujanarko</i>	14.
[ABS-37] Analysis of Power Transformer Conditions Using Adaptive Neuro Fuzzy Inference System Based on Dissolved Gas Analysis Method <i>R. B. Moch. Gozali, Bambang Sujanarko</i>	15.

[ABS-36]

Object Tracking on Semi-Automatic Surveillance Camera Using Image Processing Based on Mean-Shift Method

Catur Suko Sarwono, Faiq Aprilian Romzi, Khairul Anam, Bambang Sujanarko

Department Electrical Engineering, Engineering Faculty, University of Jember

Abstract

Closed Circuit Television (CCTV) is a closed system that using camera device to capture and save the image in specific time in where this device installed. Surveillance is more needed, in the some place, there is installed more camera for surveillance. But, fixed camera installation not effective because the range for surveillance still limited by frame area. Needed method to expand the range of monitor, object tracking is a solution that can be choose. Object tracking is a process to find object position from a video for each frame in that video. Object tracking is a process performed by computer vision that need an algorithm to analyze every frames difference in the video to know the object movement at the location. Mean-shift is non-parametric space algorithm or feature space analysis based on non-parametric. The test on that device including the effect from variable that associated with used method and device robust while get noises. The tested variable are number of iterations, target model size and increment area values. After testing the device, mean-shift method can be implemented in semi-automatic surveillance cameras by considering the variable value of the iterations, the size of the target template model, and then increment area values.

Keywords: Object Tracking, Mean-shift, Image Processing

Topic: Engineering



CERTIFICATE

No. 094/SK/VIII/2018

Appreciated to:

Catur Suko Sarwono for his/her worthy Oral Presentation titled
**“Object Tracking on Semi-Automatic Surveillance Camera Using Image Processing Based on
Mean-Shift Method”**

at International Conference on Smart Green Technology
on 27th – 28th August 2018 at The Santika Premiere Hotel, Malang, Indonesia



Drs. Awan Setiawan, MM
NIP. 19590910 198603 1 002

Organized by:



Dr. Ikhsan Bambang Sugiyono AP, M Sc
NIP. 19540305 198503 1 001

In Association with:

