

LAPORAN PERJALANAN DINAS
1st International Conference on Computer Science
and Artificial Intelligence (ICCSAI 2021)

**“Capturing the Role of Computer Science and Information
Technology in Society 5.0” 28 October 2021 | Jakarta | Indonesia**



Oleh:


Habibullah Akbar, S.Si., M.Sc., Ph.D

FAKULTAS ILMU KOMPUTER
PROGRAM STUDI MAGISTER ILMU
KOMPUTER
UNIVERSITAS ESA UNGGUL
2021

KATA PENGANTAR

Alhamdulillah, kami telah menghadiri 1st International Conference on Computer Science and Artificial Intelligence (ICCSAI 2021) “Capturing the Role of Computer Science and Information Technology in Society 5.0” sebagai peserta “Oral Presentation”. Seminar ini di selenggarakan pada tanggal 28 Oktober 2021 secara online dengan *host* adalah Universitas Bina Nusantara. ICCSAI merupakan Konferensi Internasional yang mengusung tema peran ilmu computer dan teknologi informasi menuju masyarakat 5.0 yang merupakan lanjutan dari revolusi industry 4.0. Konferensi Internasional ke-1 (Ilmu Komputer dan Kecerdasan Buatan / ICCSAI 2021) adalah forum ilmiah bagi siswa, dosen, peneliti dan ilmuwan untuk menyebarkan pengetahuan dan penelitian mereka tentang Ilmu Komputer, Sistem Informasi, Teknik Komputer dan Teknologi Informasi. Konferensi ini menyambut hangat para penulis prospektif untuk menyerahkan penelitian dan ide mereka ke ICCSAI 2021, dan berbagi pengalaman berharga dengan para ilmuwan dan cendekiawan di seluruh dunia. Tujuan konferensi ini tidak hanya sebagai medium untuk mempresentasikan makalah para peneliti atau tempat bertemunya para akademisi dan cendekiawan, tetapi juga untuk meningkatkan pengetahuan bagi masyarakat secara umum dan khususnya bagi para ilmuwan. Kami juga mengucapkan terima kasih kepada Yayasan Kemala Bangsa, dan LPPM dan biro terkait di Universitas Esa Unggul. Semoga hasil Laporan perjalanan dinas ini dapat bermanfaat bagi pihak-pihak yang mempunyai kepentingan.

Terima kasih


Habibullah Akbar, S.Si., M.Sc., Ph.D

BAB 1

LATAR BELAKANG PERJALANAN DINAS

Konferensi Internasional ke-1 tentang Ilmu Komputer dan Kecerdasan Buatan 2021 (ICCSAI 2021) mengundang para akademisi, mahasiswa di bidang teknik informatika dan ilmu komputer, pakar industri, peneliti dan akademisi untuk mengirimkan makalah mereka. Konferensi ini diadakan dari 28 Oktober 2021 di Jakarta dan dapat diakses secara online. Adapun tema konferensi ini adalah “Peran Ilmu Computer dan Teknologi Informasi menuju Masyarakat 5.0”.

Acara utama ICOPH 2019 adalah sebagai berikut;

1. Pembahasan Pembangkit Pola Inti Adaptif untuk Kontrol Interaksi Manusia dan Roboty

Presentasi akan membahas penggunaan pengontrol robot yang diilhami dari system biologis berdasarkan fungsi spesifik loop *sensorimotor* biologis yang mengontrol sistem biologis. Sistem ini didasarkan pada jaringan saraf tertentu yang disebut dengan generator pola pusat yang tersirat dalam genesis dan pergerakan ritme adaptif. Struktur-struktur ini menarik agar robot humanoid mampu mempelajari gerakan berirama untuk bergerak atau berinteraksi dengan manusia. Konsep sinkronisasi prinsip yang mendasari interaksi berirama antara manusia dan osilator dinamis akan diperkenalkan.

2. Pembahasan Model prediksi kepribadian dari postingan pengguna media sosial

Postingan pengguna dari media sosial dalam jumlah besar menjadi data menjanjikan yang dapat diubah menjadi pengetahuan. Salah satunya adalah dengan menggali informasi untuk memprediksi kepribadian pengguna. Teks menjadi jenis data yang dapat digunakan untuk mengungkapkan perasaan, pikiran, serta emosi mereka. The Big Five Personality Traits, juga dikenal sebagai OCEAN, adalah salah satu konsep dalam psikologi yang populer dalam penelitian mutakhir dalam prediksi kepribadian. Penelitian dalam pemodelan kepribadian menggunakan teks melibatkan metode ekstraksi fitur serta arsitektur terkait *deep learning* akan menarik untuk dikembangkan lebih jauh.

3. Seminar Nasional Ilmu Komputer dan Sistem Informasi (SNIKSI) 2021

Selain ICCSAI, panitia juga mengadakan seminar nasional sebagai wadah ilmiah bagi mahasiswa, dosen, peneliti dan ilmuwan untuk menyebarkan ilmu dan penelitiannya di bidang Ilmu Komputer, Sistem Informasi, Teknik Komputer dan

Teknologi Informasi. SNIKSI 2021 bertujuan untuk mendorong mahasiswa sarjana, mahasiswa pascasarjana, dosen, peneliti, insinyur dan ilmuwan dari seluruh dunia untuk berbagi dan mempublikasikan gagasan dan penelitian mereka di bidang ilmu komputer, kecerdasan komputer dan teknologi informasi. SNIKSI 2021 ini juga terlaksana berkat Konsorsium Bidang Ilmu Komputer di bawah naungan LLDIKTI Wilayah 3 yang terdiri dari 8 universitas terkemuka di bidang ilmu komputer.

Dalam kesempatan ini, sebagai perwakilan dari Fakultas Ilmu komputer, kami saya mengambil inisiatif untuk mulai menunjukkan peran dan partisipasi kelembagaan dalam kegiatan seminar internasional dan juga nasional bersama universitas, peneliti, akademisi dan pakar industri. Kegiatan ini dapat digunakan sebagai kesempatan awal dalam peninjauan kerjasama keilmuan antara Fakultas Ilmu Komputer dengan Fakultas lainnya (seperti Fakultas Psikologi dan Fakultas Sastra) yang juga telah dimulai kolaborasi menulis bersama pada makalah yang dipresentasikan.

BAB 2

PELAKSANAAN KEGIATAN SEMINAR INTERNASIONAL “ICCSAI” 2021

Konsorsium Bidang Komputer LLDIKTI Wilayah III adalah badan pengelola seminar ICCSAI yang dibentuk oleh Layanan Pendidikan Tinggi di Wilayah III. Terdapat 8 kampus yang terlibat pada seminar ini yaitu Universitas Bina Nusantara sebagai *host* utama, dan 7 kampus lainnya sebagai *co-host* yaitu:

1. Universitas Universitas Tarumanagara
2. Universitas Gunadarma
3. Universitas Pancasila
4. Universitas Mercubuana
5. Universitas Esa Unggul
6. STMIK Jakarta STI&K
7. Universitas Budi Luhur

ICCSAI merupakan Konferensi Internasional yang mencerminkan revolusi industri 4.0 dan keberlanjutan untuk masyarakat 5.0. Konferensi ini bermaksud untuk mengumpulkan para peneliti, pengusaha, ahli di industry di dunia untuk saling berbagi pengetahuan dan hasil penelitian mereka. Fokus dari konferensi ini adalah untuk mendorong transformasi digital bagi kebutuhan masyarakat modern. Oleh karenanya, tema dari kegiatan ini adalah “Menangkap Peran Ilmu Komputer dan Teknologi Informasi dalam Masyarakat 5.0”.

Adapun pembicara yang terlibat dalam acara ini adalah:

1. WELCOMING REMARKS: Prof. Dr. Ir. Harjanto Prabowo, MM
Head of Computer Science Consortium
Prof. Dr. Agus Setyo Budi, M.Sc
Head Representative of LLDIKTI III Jakarta
2. KEYNOTE SPEAKERS : Prof. Dr. Patrick Henaff
University of Lorraine
France
Dr. Derwin Suhartono
Bina Nusantara University
Indonesia
3. CONFERENCE COMMITTEE:

Advisory Committee

- o Prof. Dr. Ir. Harjanto Prabowo, MM, Bina Nusantara University, Indonesia
- o Prof. Tirta N. Mursitama, S.Sos., M.M., PhD, Bina Nusantara University, Indonesia
- o Dr. -Ing. Wahyudi Hasbi, S.Si, M.Kom, IEEE Indonesia Section
- o Prof. Teddy Mantoro , Ph.D., SMEEE, Chairman IEEE CIS Indonesia Chapter

General Chair

- o Prof. Dr. Ir. Widodo Budiharto, S.Si., M. Kom., IPM, Bina Nusantara University, Indonesia

Vice Chair

- o Dr. Yaya Sudarya Triana, M.Kom., Universitas Mercubuana, Indonesia

Secretary

- o Dr. Maria Susan Anggreainy, S.Kom., M.Kom, Bina Nusantara University, Indonesia
- o Dr. Dina Fitria Murad, S.Kom., M.Kom, Bina Nusantara University, Indonesia

Treasurer

- o Ajeng Wulandari, S.Kom, M.Kom., Bina Nusantara University, Indonesia

Publication Section

- o Dr. Ir. Alexander Agung S. Gunawan, M.Sc., IPM, Bina Nusantara University, Indonesia
- o Dr. Evaritus Didik Madyatmadja, ST., M.Kom, M.T, Bina Nusantara University, Indonesia
- o Noerlina, S.Kom., M.MSI, Bina Nusantara University, Indonesia

Track Directors and teams

- o Dr. Ir. Edy Irwansyah, IPM, Bina Nusantara University, Indonesia
- o Lina, S.T., M. Kom., Ph.D, Universitas Tarumanagara, Indonesia
- o Dr. Ionia Veritawati, Universitas Pancasila, Indonesia
- o Prof. Dr. Eri Prasetyo Wibowo, Universitas Gunadarma, Indonesia
- o Dr. Dewi A. R, S.Kom., M.Sc, Universitas Gunadarma, Indonesia
- o Habibullah Akbar, S.Si, M.Sc, Ph.D, Universitas Esa Unggul, Indonesia

Event Section

- o Dr. Puji Rahayu, Universitas Mercubuana, Jakarta

Registration Section

- o Dr. Sunny Arief Sudiro, S.Kom., MM., STMIK Jakarta STI&K, Indonesia
- o Desti Fitriati, S.Kom., M.Kom., Universitas Pancasila, Indonesia

Graphic Designer

- o Dr. Bambang, SSI., M.Kom, Bina Nusantara University, Indonesia

ICCSAI 2021 mencakup topik dalam ilmu komputer, kecerdasan komputasi, matematika terapan dan statistik yang berkaitan dengan teknologi informasi, yang dibagi menjadi 8 lagu sebagai berikut (topik yang menarik untuk pengajuan termasuk, namun tidak terbatas pada) :

Intelligent System and Machine Vision

- Agents and Multi Agents System
- Artificial Intelligence
- Condition Diagnosis
- Expert System
- Fuzzy Logic
- Genetic Algorithm
- Neural Networks and Deep Learning
- Support Vector Machine
- Swarm Intelligence
- Bio-informatics
- Biomedical Engineering
- Image Processing
- Pattern Recognition
- Signal Processing

Software Engineering, Information Security and Networks

- Compilers and Interpreters
- Computer Architecture & VLSI
- Computer Architecture and Embedded Systems
- Computer Security
- Data Communication
- Data Compression
- Data Encryption
- Digital System and Logic Design
- Distributed and Parallel Processing
- Distributed Systems
- Internet and Web Applications
- Mobile Computing
- Security & Cryptography
- Software Engineering
- Wireless Communication
- Anonymity and privacy

- Digital forensics
- Security management and policies
- Hardware and physical security
- Block chain Technology

Information Systems

- Analysis & Design of Information System
- Big Data and Data Mining
- Creative and digital arts technology
- Decision Support System
- Green Computing
- Green Software Development
- Information System Risk Management
- IS/IT Governance

Big Data and Information Technology

- Computer Based Education
- Database Systems
- E-commerce and E-governance
- Information Engineering
- Data mining
- Decision Support System
- Social Media Analytic
- Data visualization
- Cloud computing platforms
- Distributed file systems and databases
- Big data technologies
- Data capture and storage
- Geographic information system (GIS)
- Remote Sensing

Foundations of Computing and Theoretical Computer Science

- Algebra and its application in Computer Science
- Graph Theory and its application

- Mathematical modelling
- Operations research and Optimization
- Regression Analysis
- Spatial Analysis
- Econometrics
- Statistical computing and application
- Numerical methods
- Simulation and Stochastic Processes
- Computational Fluid Dynamics
- Computational Geometry
- Bayesian Approach

Computational Linguistic and Audio Processing

- Text Mining
- Language Resources
- Information Retrieval
- Information Extraction
- Sentiment Analysis Semantics
- Summarization
- Syntactic Parser
- Question Answering
- Speech Recognition
- Music and Audio processing
- Music and Art Generation with Machine Intelligence
- Music Information Retrieval
- Mathematical Linguistics
- NLP Applications
- Social Bot

Internet of Thing and Robotics

- Android Robots
- Robot Vision
- Automation and Its Applications
- Smart Home and Smart City
- Wearable devices
- Robot Intelligence

- Social Robotics
- Swarm Robots
- Smart Environment and tangible Interaction
- Field-programmable gate array (FPGA) and Embedded devices

Multimedia, Game Development and Virtual Reality

- Virtual Reality
- Human Computer Interaction
- Computer game methodology, design, and development
- User Interface and User Experience
- Augmented Reality
- Multimedia tools and Application
- Computer Graphics
- Computer Animation
- Serious Game

Adapun rundown acara utama sebagai berikut:



Universitas Esa Unggul

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2021 1st International Conference on Computer Science and Artificial Intelligence ICCSAI 2021

Time	Activities	PIC
07.00-08.00	Registration	Registration Team
VENUE VIRTUAL ROOM		
Zoom Meeting Link : https://bit.ly/3BbUPm2 Meeting ID = 937 2127 6898 Passcode = 2021		
08.00-08.10 08.10-08.20 08.20-08.30	Opening Ceremony Indonesia Raya LLDIKTI III video	MC (Mullara Permata, S.IKom)
WELCOME SPEECH :		
08.30-08.40	Prof. Dr. Ir. Widodo Budiharlo, S.SI., M. Kom., IPM, Bina Nusanlara University, Indonesia (Conference General Chair)	MC (Mullara Permata, S.IKom)
08.40 - 08.50	Prof. Tirla N. Mursilama, S.Sos., M. M., Ph.D. (Vice Reclor Research & Tech Transfer Bina Nusanlara University, Indonesia)	MC (Mullara Permata, S.IKom)
08.50 - 09.00	Prof. Dr. Ir. Harjanlo Prabowo, MM, Bina Nusanlara University, Indonesia (Advisory Committee, Reclor Bina Nusanlara University, Indonesia)	MC (Mullara Permata, S.IKom)
09.00 - 09.10	Prof. Dr. Agus Setyo Budi, M.Sc (Head Representative of LLDIKTI III Jakarta)	MC (Mullara Permata, S.IKom)
KEYNOTE SPEAKER		
09.10-09.50	Dr. Derwin Suharlono (Bina Nusanlara University, Indonesia)	Dr. Rusdah, S.Kom., M.Kom.
09.40 -10.20	Prof. Patrick Henaff (Lorraine University, France)	Dr. Rusdah, S.Kom., M.Kom.
PARALLEL SESSIONS I :		
10.30-12.00 (@ 15 min)	Room I - ICCSAI: Track Image Processing & Computer Vision	Prof. Dr. Erl Prasetyo Wibowo
	Room II - ICCSAI: Track Image Processing & Computer Vision	Dr. Ionla Verifawati
	Room III -ICCSAI: Track Information System	Dr. Yaya Sudarya Triana, M.Kom
	Room IV - ICCSAI: Track Information System	Dr. Sunny Arief Sudro, S.Kom., MM.
	Room V - ICCSAI: Track Inf System & Lit Review	Dr. Ir. Edy Irwansyah
	Room VI - ICCSAI: Track Lit Review	Lina, S.T., M.Kom., Ph.D
	Room VII - ICCSAI: Track Lit Review	Dr. Bheha Agus Wardijono, S.SI
12.00-13.00	BREAK	
PARALLEL SESSIONS II :		
13.00-15.00 (@ 15 min)	Room I - ICCSAI: Track Comp Science	Dr. Dina Filria Murad, S.Kom., M.Kom
	Room II - ICCSAI: Track Comp Science	Prof. Dr. Ir. Widodo Budiharlo, S.SI., M. Kom
	Room III -ICCSAI: Track Comp Science	Dr. Evaritus Didik M, S.T., M.Kom
	Room IV - I ICCSAI: Track Comp Science	Anik Hanifatul Azizah, S.Kom., M.IM
	Room V - ICCSAI: Track Informatika	Dr. Ir. Alexander Agung S. Gunawan, M.Sc.
15.00-15.30	BREAK	
15.30-15.45	Announcement	COMMITTEE Operator: Kenny, Hanif
15.45-16.00	Closing	MC (Mullara Permata, S.IKom) Operator : Kenny, Hanif

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Parallel Room : 10.30 AM-12.00 PM

Room I Session Chair (Prof. Dr. Eri Prasetyo Wibowo)
Operator : Jonathan

Live Presentation : <https://bit.ly/3BbUPm2>
Meeting ID = 937 2127 6898
Passcode = 2021

TIME	PAPER ID	TITLE AND AUTHOR
10.30 AM-10.45 AM	5176	Line Follower Smart Trolley using RFID Alexander Agung Santoso Gunawan, Alicia Taslim, Junaedi Dede, Muhamad Daffa Mennawi
10.45 AM-11.00 AM	5796	A Hydrodynamic Analysis of Water System in Dadahup Swamp Irrigation Area Sentot Purboseno, Teddy Suparyanto, Alam Ahmad Hidayat, Bens Pardamean
11.00 AM-11.15 AM	5383	Smart Electricity Meter as An Advisor for Office Power Consumption Boby Siswanto
11.15 AM-11.30 AM	5240	Development of Portable Temperature and Air Quality Detector for Preventing Covid-19 Widodo Budiharto, Alexander Agung Santoso Gunawan, Edy Irwansyah, Danu Widhyatmoko, Retno Dewanti, Jarot Soeroso Sembodo
11.30 AM-11.45 AM	5348	Implementation of Face Recognition Method for Attendance in Class Bryan Gavriell, Nelsen Ardian, Felix Fauzan, Kristien Margi Suyaningrum
11.45 AM-12.00 AM	5800	AR-Mart: The Implementation of Augmented Reality as a Smart Self-Service Cashier in the Pandemic Era Chasandra Puspitasari, Gusti Pangestu, Anita Rahayu, Bening Insaniyah Al-Abdillah



Parallel Room : 10.30 AM-12.00 PM

Room II Session Chair (Dr. Ionia Veritawati)
Operator : Hanif

Live Presentation : <https://bit.ly/3BbUPm2>
Meeting ID = 937 2127 6898
Passcode = 2021

TIME	PAPER ID	TITLE AND AUTHOR
10.30 AM-10.45 AM	5785	Exploration of React Native Framework in designing a Rule-Based Application for healthy lifestyle education Anik Hanifatul Azizah, Siti Zuliatul Faidah, Muhammad Bahrul Ulum, Putri Handayani
10.45 AM-11.00 AM	5386	Building Natural Language Understanding System from User Manual to Execute Office Application Functions Anis Cherid, Edi Winarko
11.00 AM-11.15 AM	5593	Study on Face Recognition Techniques Vanessa Giovani, Ivyna Johansen, Dea Asya Ashilla
11.15 AM-11.30 AM	5631	Sinophobia in Indonesia and Its Impact on Indonesia-China Economic Cooperation with the SVM (Support Vector Machine) Approach Tia Mariatul Kiblah, Rangga Aditya Elias, Eka Miranda, Aditya Permana
11.30 AM-11.45 AM	5527	A Survey: Crowds Detection Method on Public Transportation Timothy Gilbert, handry novianto, Ruben Setiawan, Darren Anando Leone, Novita Hanfiah
11.45 AM-12.00 AM	5556	Effective Methods for Fake News Detection: A Systematic Literature Review Shevila Pannadhika Sumedha, Rifdah Defrina Abdiansyah, Dewi Multiara

Makalah kami berjudul :
**EXPLOITING FACIAL ACTION UNIT IN VIDEO FOR RECOGNIZING DEPRESSION
 USING METAHEURISTICS AND NEURAL NETWORKS**
 Masuk dalam jadwal sebagai berikut:



Parallel Room : 10.30 AM-12.00 PM

Room III Session Chair (Dr. Yaya Sudarya Triana, M.Kom) Operator : Prayogi		
Live Presentation : https://bit.ly/3BbUPm2 Meeting ID = 937 2127 6898 Passcode = 2021		
TIME	PAPER ID	TITLE AND AUTHOR
10.30 AM- 10.45 AM	5220	Impact of Computer Vision With Deep Learning Approach in Medical Imaging Diagnosis Cheryl Angelica, Charleen Charleen, Hendrik Purnama, Fredy Purnomo
10.45 AM- 11.00 AM	5447	Student Performance Based on Student Final Exam Prediction Ignasius Kenny Bagus; Luwita; Nasrullah; Dina Fityria Murad
11.00 AM- 11.15 AM	5847	Exploiting Facial Action Unit in Video for Recognizing Depression using Metaheuristic and Neural Networks Habibullah Akbar; Sintia Dewi; Yuli Azmi Rozali; Lita Patricia Lunanta; Nizirwan Anwar; Djasminar Anwar
11.15 AM- 11.30 AM	5905	Auto-Tracking Camera System for Remote Learning Using Face Detection and Hand Gesture Recognition Based on Convolutional Neural Network Henry Ham
11.30 AM- 11.45 AM	5777	Street View Object Detection for Autonomous Car Steering Angle Prediction Using Convolutional Neural Network Ilvico Sonata, Yaya Heryadi, Widodo Budiharto, Antoni Wibowo
11.45 – 12.00 AM	5602	Analysis of Big Data in Healthcare Using Decision Tree Algorithm Evaristus Didik Madyatmadja



Parallel Room : 10.30 AM-12.00 PM

Room IV Session Chair (Dr. Sunny Arief Sudiro, S.Kom., MM.)
Operator : Reinhart Previano

Live Presentation : <https://bit.ly/3BbUPm2>
Meeting ID = 937 2127 6898
Passcode = 2021

TIME	PAPER ID	TITLE AND AUTHOR
10.30 AM-10.45 AM	5307	The Effect of UI/UX Design on User Satisfaction in Online Art Gallery Alvin Wijaya, Wendy Wihalim, Kefry Kefry, Alexander Agung Santoso Gunawan
10.45 AM-11.00 AM	5452	Development of Smart Restaurant Application for Dine-In Ahmad Ridhwan Naufal, Andriatama Bagaskara, Ivano Ekasetia Dhojopatmo, Ali Abdurrab, Widodo Budiharto
11.00 AM-11.15 AM	5795	Design of Water Information Management System in Palm Oil Plantation Andreas Wahyu Krisdiarto, Eddy Julianto, Irya Wisnubhadra, Teddy Suparyanto, Digdo Sudigyo, Bens Pardamean
11.15 AM-11.30 AM	5296	Estimation of Technology Acceptance Model (TAM) on the Adoption of Technology in the Learning Process Using Structural Equation Modeling (SEM) with Bayesian Approach Elok Fitriani Rafikasari; Nur Iriawan
11.30 AM-11.45 AM	5269	Identify high-priority barriers to effective digital transformation in higher education: A case study on XYZ University Bayu Rima Aditya, Dina Filtria Murad, Ridi Ferdiana, Sri Suning Kusumawardani, Bambang Dwi Wijanarko
11.45 – 12.00 AM	5603	Detrimental factors of the development of Smart City and Digital City Evaristus Didik Madyatmadja



Parallel Room : 10.30 AM-12.00 PM

Room V Session Chair (Dr. Ir. Edy Irwansyah)
Operator : Irfan

Live Presentation : <https://bit.ly/3BbUPm2>
Meeting ID = 937 2127 6898
Passcode = 2021

TIME	PAPER ID	TITLE AND AUTHOR
10.30 AM-10.45 AM	5347	Design of Cadets Administration System for Nusantara Cilacap Maritime Academy Based On Website Emny Harna Yossy
10.45 AM-11.00 AM	5365	The Impact of E-Transport Platforms' Gojek and Grab UI/UX Design to User Henry Hamilton Prasetya, Bima Bagaskarla Ridwanto, Muhammad Ashraf Rahman
11.00 AM-11.15 AM	5243	Effectiveness of LMS in Online Learning by Analyzing Its Usability and Features I Putu Gede Prama Duta, Rio Rio, Mochamad Rizky Febriansyah, Maria Susan Anggreainy
11.15 AM-11.30 AM	5381	E-Learning Issues and Challenges: An Exploratory Study Indriani Noor Hapsari, Imam Sutanto, Armando Rilentuah Parhusip, Gerry Firmansyah, Sawali Wahyu, Ainur Rosyid
11.30 AM-11.45 AM	5076	Web Based Application for Ordering Food Raw Materials Rita Layona, Budi Yulianto, Yovita Tunardi
11.45 AM-12.00 AM	5544	Analyze User Interface of Learning Management System (LMS) Arief Darvin, Jeffry Kosasih, Stefanus Stefanus



Parallel Room : 10.30 AM-12.00 PM

Room VI Session Chair (Lina, S.T., M.Kom., Ph.D)
Operator : Andika

Live Presentation: <https://bit.ly/3BbUPm2>
Meeting ID = 937 2127 6898
Passcode = 2021

TIME	PAPER ID	TITLE AND AUTHOR
10.30 AM-10.45 AM	5302	Predicting Stock Market Prices using Time Series SARIMA Sena Kumara, Aditya Winata, Daryl Latif, Derwin Suhartono
10.45 AM-11.00 AM	5811	Memorize COVID-19 Advertisement: Customer Neuroscience Data Collection Techniques by Using EEG and fMRI Maria Seraphina Astriani
11.00 AM-11.15 AM	5530	Performance Analysis Between Cloud Storage and NAS to Improve Company's Dimas Sekti Adji, Gabriel Eduardus, Michael Michael, Minawati Minawati, Widodo Budiharto
11.15 AM-11.30 AM	5798	Spatiotemporal Features Learning from Song for Emotions Recognition with Time Distributed CNN Andry Chowanda
11.30 AM-11.45 AM	5891	Review Literature Performance : Quality of Service from Internet of Things for Transportation System Nizirwan Anwar, Arief Kusuma Among Praja, Habibulah Akbar, Muhammad Fachrudin Arrozi Adikara, Roesfiansjah Rasjidin, Dewanto Rosian Adhy
11.45 AM-12.00 AM	5306	Block Chain Technology behind Cryptocurrency and Bitcoin for Commercial Transactions Frederik Arnold Cahyadi, Albert Ivando Owen, Franseda Ricardo, Alexander Gunawan



Parallel Room : 10.30 AM-12.00 PM

**Room VII Session Chair (Dr. Bheta Agus Wardijono, S.Si)
Operator : Reynald Slamet**

Live Presentation: <https://bit.ly/3BbUPm2>
Meeting ID = 937 2127 6898
Passcode = 2021

TIME	PAPER ID	TITLE AND AUTHOR
10.30 AM-10.45 AM	5195	The Influence of UI UX Design to Number of Users Between 'Line' and 'Whatsapp' Sartika Devina, Angelica Nadia, Vicky Chen, Alexander Gunawan
10.45 AM-11.00 AM	5368	A Systematic Literature Review of Fintech Investment and Relationship with Bank in Developed Countries Almira Saphyra, Roesita Zahra, Noerlina Noerlina
11.00 AM-11.15 AM	5732	Cultural Tourism Technology Used and Themes: A Literature Review Hendro Nindito, Harjanto Prabowo, Spits Warnars Harco Leslie Hendric, Sfenrianto Sfenrianto
11.15 AM-11.30 AM	5605	Smart tourism Services: A Systematic Literature Review Evaristus Didik Madyatmadja
11.30 AM-11.45 AM	5604	Application of Internet of Things in Smart City: A Systematic Literature Review Evaristus Didik Madyatmadja
11.45 AM-12.00 AM	5601	Big Data For Smart City: An Advance Analytical Review Evaristus Didik Madyatmadja



Parallel Room : 13.00 AM-15.00 PM

**Room I Session Chair (Dr. Dina Fitria Murad, S.Kom., M.Kom)
Operator : Jonathan**

Live Presentation: <https://bit.ly/3BbUPm2>
Meeting ID = 937 2127 6898
Passcode = 2021

TIME	PAPER ID	TITLE AND AUTHOR
13.00 PM- 13.15 PM	5346	Systematic Literature Review: An Intelligent Pulmonary TB Detection from Chest X-Rays Jimmy, Tjeng Wawan Cenggoro, Bens Pardamean
13.15 PM- 13.30 PM	5567	A Systematic Literature Review: Database Optimization Techniques Rizki Ashari, Muhammad Fachri Akbar, Winata Dharmawan Thamrin, Novita Hanafiah
13.30 PM- 13.45 PM	5417	A Review of Signature Recognition Using Machine Learning Elizabeth Ann Soelistio, Rafael Edwin Hananto Kusumo, Zevira Varies Martan, Edy Irwansyah
13.45 PM- 14.00 PM	5456	Utilization Big Data And GPS To Help E-TLE System In The Cities Of Indonesia David Yu, Andini Artika Dewi, Sindy Nikita Wijaya, Alexander Gunawan
14.00 PM- 14.15 PM	5836	Development of Stock Market Price Application to Predict Purchase and Sales Decisions Using Proximal Policy Optimization Method Alexander A.S Gunawan; Bilqis Ashifa S; Reinert Y. Rumagit; Heri Ngarianto
14.15 PM- 14.30 PM	5806	Explainable Supervised Method for Genetics Ancestry Estimation Anif Budiarto, Bens Pardamean
14.30 PM - 14.45 PM	5559	Determining the best Delivery Service in Jakarta using Tsukamoto Fuzzy Algorithm Ignatius Hansen, Phillips Tionathan, Yohanes Raditya Janarto Ignatius Hansen, Phillips Tionathan, Yohanes Raditya Janarto



Parallel Room : 13.00 PM -15.00 PM

Room II Session Chair (Prof. Dr. Ir. Widodo Budiharto, S.Si., M. Kom)
Operator : Hanif

Live Presentation: <https://bit.ly/3BbUPm2>
Meeting ID = 937 2127 6898
Passcode = 2021

TIME	PAPER ID	TITLE AND AUTHOR
13.00 PM- 13.15 PM	5234	Finetuning IndoBERT to Understand Indonesian Stock Trader Slang Language Anderies Anderies, Reza Rahutomo, Bens Pardamean
13.15 PM- 13.30 PM	5241	Development of Robot to Clean Garbage in River Streams with Deep Learning Briyan Nathanael Rumahorbo, Antonio Josef, Muhammad Hafizh Ramahdhansyah, Handy Pratama, Widodo Budiharto
13.30 PM- 13.45 PM	5388	Aspect Based Sentiment Analysis: Restaurant Online Review Platform in Indonesia with Unsupervised Scraped Corpus in Indonesian Language Clement Neonardi, Samuel Mahatmaputra Tedjojuwono
13.45 PM- 14.00 PM	5274	A Comparison of Machine Translation Performance on Low-Resource Language Lexicon based Sentiment Analysis Cuk Tho; Yaya Heryadi; Imam Herwidiana Kartowisastro; Widodo Budiharto
14.00 PM- 14.15 PM	5517	The Search for the Best Real-Time Face Recognition Method for Finding Potential COVID Patients Kevin, Eugene Reginald Patrick; Samuel Wijaya; Edy Irwansyah
14.15 PM- 14.30 PM	5210	A Comparison of Artificial Intelligence-Based Methods in Traffic Prediction Priscilla Diamanta; Gian Avila; M. Ilham Hudaya; Edy Irwansyah
14.30 PM - 14.45 PM	5159	The Influence of UI UX Design to Number of Users Between 'Line' and 'Whatsapp' Eka Miranda; Faqir M Bhatti; Mediana Aryuni; Charles Bernando
14.45 PM- 15.00 PM	5622	Indonesia China Trade Relations, Social Media and Sentiment Analysis: Insight from Text Mining Technique Eka miranda, Rangga Aditya Elias, Tia Mariatul Kiblich, Aditya Permana



Parallel Room : 13.00 PM -15.00 PM

**Room III Session Chair (Dr. Evaritus Didik Madyatmadja, ST., M.Kom)
Operator : Prayogi**

Live Presentation: <https://bit.ly/3BbUPm2>
Meeting ID = 937 2127 6898
Passcode = 2021

TIME	PAPER ID	TITLE AND AUTHOR
13.00 PM- 13.15 PM	5268	Coronary Artery Disease Prediction Model using CART and SVM: A Comparative Study Mediana Aryuni, Eka Miranda, Charles Bernando, Andrian Hartanto
13.15 PM- 13.30 PM	5682	Towards Classification of Personality Prediction Model: A Combination of BERT Word Embedding and MLSMOTE Henry Lucky; Roslynlia; Derwin Suhartono
13.30 PM- 13.45 PM	5304	Sentiment Analysis using SVM and Naïve Bayes Classifiers on Restaurant Review Jason Cornelius Sugitomo; Nathaniel Kevin; Nayra Jannatri; Derwin Suhartono
13.45 PM- 14.00 PM	5353	Comparative of Advanced Sorting Algorithms (Quick Sort, Heap Sort, Merge Sort, Intro Sort, Radix Sort) Based on Time and Memory Usage Marcellino; Davin William Pratama; Steven Santoso Suntiarko; Kristien Margi Suryaningrum
14.00 PM- 14.15 PM	5700	Level of Password Vulnerability Indira Mannuela; Jessy Putri; Michael; Maria Susan Anggreainy
14.15 PM- 14.30 PM	5260	Sentiment Analysis of E-Commerce Review using Lexicon Sentiment Method Ferry Agustius Wong; Maria Susan Anggreainy; Wahyu Raihan Hidayat
14.30 PM- 14.45 PM	5781	Extract Transform Loading (ETL) Based Data Quality for Data Warehouse Munawar
14.45 PM- 15.00 PM	5561	Designing And Implementing Real-Time Rendering Augmented Reality Photobooth Muhamad Fajar; Yogi Udjaja; Eko Setyo Purwanto; Anderies



Parallel Room : 13.00 PM -15.00 PM

**Room IV Session Chair (Anik Hanifatul Azizah, S.Kom, M.IK)
Operator : Ronald Sumichael**

Live Presentation : <https://bit.ly/3BbUPm2>
Meeting ID = 937 2127 6898
Passcode = 2021

TIME	PAPER ID	TITLE AND AUTHOR
13.00 PM- 13.15 PM	5551	Self-Checkout System Using RFID (Radio Frequency Identification) Technology: A Survey Fachrurrozi Maulana; Nixon; Rizky Prawira Putra; Novita Hanafiah
13.15 PM- 13.30 PM	5314	Covid-19 Vaccine Tweets - Sentiment Analysis Naufal Rifki Fauzan, Daniel Alexander, Muhammad Siraz Hafizh; Maria Susan A.
13.30 PM- 13.45 PM	5259	Health Chatbot Using Natural Language Processing For Disease Prediction And Treatment Philip Indra Prayitno, Reinhart Perbowo Pujo Leksono, Fernando Chai, Richard Aldy, Widodo Budiharto
13.45 PM- 14.00 PM	5483	Expert System to Predict Acute Inflammation of Urinary Bladder and Nephritis Using Naïve Bayes Method Ria Arafiyah, Diyah Anggraeny, Rachel Haryawan, Zakiyah Hamidah
14.00 PM- 14.15 PM	5315	Data Encryption Using Des Method Ramadhany Nuryansyah, Artha Bastanta, Christian Aditya
14.15 PM- 14.30 PM	5770	IoT Sensors Integration for Water Quality Analysis Hermanloro Hermanloro, Supaman Superman, Dominikus Sutrisno Ariyanto, Reza Rahulomo, Teddy Suparyanto, Bens Pardamean
14.30 PM - 14.45 PM	5783	Indonesian Banking Stock Price Prediction with LSTM and Random Walk Methods Mike Christ Heru; Ro'fah Nur Rachmawati; Derwin Suhartono
14.45 PM- 15.00 PM	5782	Spread of COVID-19 Deaths in Jakarta: Cluster and Regression Analysis Ro'fah Nur Rachmawati, Intan Saskia, Derwin Suhartono



Parallel Room : 13.00 PM -15.00 PM

**Room V Session Chair (Dr. Ir. Alexander Agung S. Gunawan, M.Sc.)
Operator : Irfan**

Live Presentation : <https://bit.ly/3BbUPm2>
Meeting ID = 937 2127 6898
Passcode = 2021

TIME	PAPER ID	TITLE AND AUTHOR
13.00 PM- 13.15 PM	5362	Factors that Affect Data Gathered Using Interviews for Requirements Gathering Edward Rezkzy, Russell Olniel Tjakra, Hendra Hendra, Alexander A S Agung
13.15 PM- 13.30 PM	5305	Developing An Automated Face Mask Detection Using Computer Vision and Deep Learning Samuel Mahatmaputra Tedjojuwono; Sheryl Livia Sulaiman
13.30 PM- 13.45 PM	5372	Enhancement Design for Smart Parking System Using IoT and A-Star Algorithm Briant Stevanus; Suharjito; Arief Agus Sukmandhani
13.45 PM- 14.00 PM	5093	Comparison of Gaussian Hidden Markov Model and Convolutional Neural Network in Sign Language Recognition System Suharjito, Herman Gunawan, Devriady Pratama
14.00 PM- 14.15 PM	5178	An Efficient System to Collect Data for AI Training on Multi-Category Object Counting Task Brian Haessel; Munif Faisol Abdul Rahman; Steven Andry; Tjeng Wawan Cenggoro
14.15 PM- 14.30 PM	5367	Compare the Path Finding Algorithms that are Applied for Route Searching in Maps Wendy Susanto; Samuel Dennis; M Brian Aqacha Handoko; Kristien Margi Suryaningrum
14.30 PM - 14.45 PM	5523	Waste Classification Using EfficientNet-B0 William Mulim; Muhammad Farrel Revikasha; Rivandi; Novita Hanafiah
14.45 PM- 15.00 PM	5801	Immersive Experience with Non-Player Characters Dynamic Dialogue Yogi Udjaja, Muhammad Fikri Hasani

BAB 3
HASIL KEGIATAN
SEMINAR INTERNASIONAL “ICCSAI” 2021

Dalam kegiatan ini, kami mempresentasikan 2 makalah yang pertama saya sebagai *first author* dan yang kedua menjadi *co-author* dengan makalah yang berjudul “Review Literature Performance : Quality of Service from Internet of Things for Transportation System”.

Kegiatan presentasi masing-masing diberikan total waktu 15 menit, dimana terdiri dari 10 menit presentasi dan 5 menit untuk diskusi. Presentasi yang saya lakukan kurang lebih dari 10 menit dan alhamdulillah paper yang kami presentasikan mendapatkan *award* sebagai *Best Presenter 3*.



Lampiran 1. Sertifikat kegiatan



This certificate is for the 2021 1st International Conference on Computer Science and Artificial Intelligence (ICCSAI). It is awarded to a group of authors for their work on exploiting facial action units in video for recognizing depression. The certificate is signed by the General Chair and the Rector of BINUS University.

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*Habibullah Akbar; Sintia Dewi; Yuli Azmi Rozali;
Lita Patricia Lunanta; Nizarwan Anwar; Djasmimar Anwar*

5847 : Exploiting Facial Action Unit in Video for Recognizing Depression using
Metaheuristic and Neural Networks
to certify that they completed to satisfaction as

Author
Jakarta, October 28, 2021

Prof. Dr. Ir. Widodo Budiharto, S.Si., M. Kom., IPM., SMIEEE
General Chair ICCSAI 2021

Prof. Dr. Ir. Harjanto Prabowo, MM
Rector of BINUS University
Chief Consortium of Computer Science



This certificate is for the 2021 1st International Conference on Computer Science and Artificial Intelligence (ICCSAI). It is awarded to a group of authors for their review literature performance on quality of service from the Internet of Things for transportation systems. The certificate is signed by the General Chair and the Rector of BINUS University.

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5891 : Review Literature Performance : Quality of Service from Internet of Things
for Transportation System
to certify that they completed to satisfaction as

Author
Jakarta, October 28, 2021

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Lampiran 2. Buku abstrak

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Conference Record Number: 53272

5847: Exploiting Facial Action Unit in Video for Recognizing Depression using Metaheuristic and Neural Networks

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Abstract: The ubiquity of coronavirus cases around the world has been severe and its impact is not only affecting the economy and physical health, but also mental health such as depression. Unfortunately, the number of coronavirus cases may inhibit people to look for general practitioners or hospitals. This study represents research on facial behaviour analysis on recognizing depression from facial action units extracted from images or videos. We aimed to find a reduced set of facial action unit features using the metaheuristic approach. We utilized particle swarm optimization to select the best predictors and feed them to optimized standard feedforward neural networks. We obtained 97.83% accuracy for depression detection based on Distress Analysis Interview Corpus Wizard-of-Oz (DAIC WOZ) database containing 189 video sessions associated with the Patient Health Questionnaire depression label. This level of accuracy requires almost 9 minutes. However, this level of accuracy is higher than other state-of-the-art methods.

Keywords: depression, PHQ-8, facial action unit, PSO

5891: Review Literature Performance : Quality of Service from Internet of Things for Transportation System

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Collaboration
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Abstract : The Internet of Things (IoT) is one of the technologies that are becoming a trend nowadays. Needs and implementation develop very fast. These conditions encourage increased infrastructure requirement and good data management. The number of points connected to IoT increases rapidly, as does the quantity and quality of data sent. IoT is a technology that connects objects (things) or devices in a digital communication. Is a development from the previous internet connection that connects only computer devices. In a Scale-up transportation system, it can occur due to an increase in connected vehicles, the amount of data sent, the area or range of vehicle mobility that is increasingly widespread. Data generated by the IoT system will be widely used by various parties according to their interests. Data increase will result in a decrease in data quality in terms of data source trust, data security from improper changes and timely and targeted data distribution. The expected result of the research is an IoT system in transportation that is able to produce valid, accurate and up to date data. The use of these data further improves the performance of the transportation system. Transportation is one area that has the potential to benefit from IoT. But unique and challenging characteristics require a guarantee of the quality of the IoT. The flow of information on transportation is needed to improve services for users. Utilization of IoT in transportation will provide major benefits such as ease of getting vehicle position information, accuracy in getting information on engine conditions and in the future leading to transportation automation. If the quality of the data flow is not guaranteed, the implementation of IoT will pose a potential hazard.

Keywords: IoT architecture, contribution, extraction mapping, focus area and contribution, object research and implementation, transportation efficiency increasingly Introduction.

Lampiran 3. Foto kegiatan





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