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Science Series (SCIS)

SEMARANG

July 10, 2019

Civil Engineering, Electrical Engineering, Information System, Information Technology, and Agricultural Technology

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FOREWORD

Research Synergy Foundation is the social enterprise platform that focus on developing collaborative networks among both researchers, lecturers, scholars, and practitioners globally for the realization of an equal quality of knowledge acceleration between developed and developing countries. We focus on opening the gates of research collaboration between countries. We introduce and encourage scientific publications from developing countries. We create scientific forums in order to boost the creation and diffusion of new knowledge.

Known as a catalyst and media collaborator among researchers around the world is the achievement that we seek through this organization. By using the media of International Conference which reaches all researcher around the world we are committed to spread our vision to create opportunities for promotion, collaboration and diffusion of knowledge that is evenly distributed around the world.

Our Vision:

Our vision is to be world class organization that encourage acceleration quality of knowledge in developing country.

Our mission:

First, promoting scientific journals from developing countries as an equitable distribution tools of knowledge. Second, opens research collaboration opportunities among countries, educational institutions, organizations and among researchers as an effort to increase capabilities. Third, create a global scientific forum of disciplinary forums to encourage strong diffusion and dissemination for innovation.

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CONFERENCE CHAIR MESSAGE

We are delighted to welcome you to the Science Series: Civil Engineering, Electrical Engineering, Information System, Information Technology, and Agricultural Technology Conference (SCIS 2019) by Semarang University and Research Synergy Foundation as official partner held on July 10, 2019 at Gumaya Tower Hotel, Semarang, Indonesia.

This Conference bring together leading academician, researchers and scholars to exchange and share their experiences and research results on all aspects of Business, Economy, Management and Social Studies towards Economy. Moreover, it shows up as a cutting-edge Science Research platform to gather presentations and discussions of recent achievements by leading researchers in academic research.

It has been our privilege to convene this conference. Our sincere thanks, to the conference organizing committee; to the Program Chairs for their wise advice and brilliant suggestion on organizing the technical program and to the Program Committee for their through and timely reviewing of the papers. Recognition should go to the Local Organizing Committee members who have all worked extremely hard for the details of important aspects of the conference programs and social activities.

We welcome you to Semarang, Indonesia and hope that this year's conference will challenge and inspire you, and result in new knowledge, collaborations, and friendships.

Best regards,

Dr. Dyah Nirmala Arum Janie
Conference Chair of SCIS 2019

KEYNOTE SPEAKER

Prof. Magaly Koch currently work as a research associate professor at the Remote Sensing Center, Boston University, MA, USA and a lecturer in civil and environmental engineering at Tufts University, MA, USA. She is also recognized as a remote sensing geologist with more than 25 years of experience in applied environmental research, including groundwater resources in arid lands, land degradation problems, natural hazards, and human impact in environmental change. She was a visiting professor in Spain, Japan, and Indonesia. She has supervised numerous international projects in the Middle East, Africa, Europe, and East Asia.

She was awarded a Marie Curie Fellowship by the European Union to undertake post-doctoral research at the Earth Science Institute, Consejo Superior de Investigaciones Científicas (CSIC), Barcelona, Spain. More recently, she was awarded a Fulbright Fellowship to undertake teaching and research activities at Tohoku University in Japan. Her current research in 2019 are about Satellite-borne detection of high diurnal amplitude of sea surface temperature in the seas west of the Tsugaru Strait, Japan and Estimating land subsidence in relation to urban expansion in Semarang city, Indonesia. She is particularly interested in projects addressing global water scarcity and flooding problems as related to extreme weather conditions through an interdisciplinary approach. Koch is an expert in the application of geospatial technologies in natural and applied sciences and has extensive managerial experience in conducting international and multidisciplinary research projects in many parts of the world.

KEYNOTE SPEAKER

Prof. Ahmed El-Sayed Gaber currently work as an associate Professor at Geology Department, Faculty of Science, Port-Said University, Egypt. He is also recognized as a geologist specialized in the applications of Remote Sensing and hydro-geophysics for groundwater discovery in arid lands, geomorphological and geological mapping, land subsidence detection, and archaeological investigations. He has conducted research on the: (i) estimation of the groundwater potentiality in the Western Desert of Egypt, and Chad Republic, (ii) archeological exploration in Japan and Egypt, (iii) evaluating the land subsidence rate using the differential radar interferometry technique in Egypt and Indonesia, and (iv) soil mapping using the polarization signature of full polarimeteric SAR data.

He has 15 Years' experience of teaching the courses of Remote Sensing, physical geology, geomorphology and photo-geology and GIS in Geology Department, Faculty of Science, Port-Said University, Egypt. Moreover, he had published his research in many reputable international journals and conferences. He is also co-author on Materials of Chapter 10 of the Book "Computer Processing of Remotely-Sensed Images: An Introduction, Fourth Edition, with Paul Mather and Magaly Koch.

KEYNOTE SPEAKER

Prof. Mudjiastuti Handayani got her Professorship in civil engineering of Universitas Semarang Indonesia. Her research specialized focus on civil engineering transportation and bring out several book writing teaching titled: Influence System Against Network traffic road safety, Influence of Urban Transportation System against Fuel Consumption, Transport and Urban Transport Systems and Transport System. Her global experience as a scholar of reviewers LPS Quantum Research International HRM gives more expanding horizon of the dissemination of civil engineering transportation knowledge development. Her academic career also involved as a faculty member in Universitas Semarang in the position of Dean of Faculty of Engineering, Advisory forum Transport Studies College and Member of Senate Faculty of Engineering Universitas Semarang. Prof Mudjiastuti recognized as Honorary President of the Republic of Indonesia with Lancana Karya Satya 20 years and Outstanding lecturer of Universitas Semarang Indonesia.

Her current achievement in 2019 is Expert Top Transport In Terms of the Indonesian Transportation Society (MTI), Jakarta. Apart from her academic activities in the university, her experience in maintaining professional association is highly appreciated. Several associations has been followed such as Forum Transport Studies College, Hathi Hydro Indonesian Engineers Association (Member) PII Indonesian Engineers Association (Member), MTI Indonesian Transportation Society (Member), Engineer Association of Indonesia (PII), MTI JATENG (Secretary), APTI Engineering Professional Association of Indonesia (Council of experts), Tenaga Expert National Construction Association (Advisory), and College of Transport Studies Forum (Advisory Council)

CONFERENCE PROGRAM

Day 01- Wednesday | July 10, 2019
Venue: North Ballroom
Gumaya Tower Hotel – Semarang, Indonesia

Time	Duration	Activities
07.30 - 08.45	75'	**Welcome Reception and Registration**
08.45 - 08.50	5'	**Welcoming MC**
08.55- 09.05	10'	**Welcome Remarks**
		Andy Kridasusila, MM.
		Rector of Semarang University
09.05 - 09.15	10'	**Welcome Remarks**
		Dr. Hendrati Dwi Mulyaningsih
		Research Synergy Foundation, Indonesia
09.15 - 09.25	10'	**Opening Speech**
		Dr. Dyah Nurmala Arum Janie
		General Chair Semarang Conference Series 2019
09.25 - 09.45	20'	**Award Ceremony & Group Photo**
09.45 - 10.00	15'	**Coffee Break**
10.00 - 12.00	120’	**Parallel Keynote Speech**
12.00 - 13.00	60'	**Lunch Break**
13.00 - 17.15	255'	**Parallel Session**
17.15 – 17.25	10'	**Closing Speech**
		Dr. Dyah Nurmala Arum Janie
		General Chair Semarang Conference Series 2019

17.25 - 17.45	20'	**Award Ceremony**
17.45 – 17.50	5’	**Closing MC**

PARALLEL KEYNOTE SPEECH

BES Conference

North Ball Room

Time	Duration	Activities
10.00 - 10.40	40’	**Keynote Speech**
		Prof. Kesi Widjajanti
		Universitas Semarang, Indonesia
10.40 - 11.20	40’	**Keynote Speech**
		Prof. Ahmad Rozelan Yunus
		Universiti Teknikal Malaysia Melaka, Malaysia
11.20 – 12.00	40’	**Keynote Speech**
		Prof. Chih-Peng Chu, Ph.D.
		National Dong Hwa University, Taiwan

SOSCIS Conference

Teak Room

Time	Duration	Activities
10.00 - 10.40	40’	**Keynote Speech**
		Prof. Jennifer Oxley
		Monash University Accident Research Centre Australia
10.40 - 11.20	40’	**Keynote Speech**
		Prof. Hardhani Widhiastuti
		Universitas Semarang, Indonesia
11.20 – 12.00	40’	**Keynote Speech**
		Prof. David Menier
		University of Southern Brittany, France

SCIS Conference

Ruby 1 Room

Time	Duration	Activities
10.00 - 10.40	40’	**Keynote Speech**
		Prof. Magaly Koch
		Boston University, USA
10.40 - 11.20	40’	**Keynote Speech**
		Prof. Ahmed El-Sayed Gaber
		Port-Said University, Egypt
11.20 – 12.00	40’	**Keynote Speech**
		Prof. Mudjiastuti Handayani
		Universitas Semarang, Indonesia

Day 01 Wednesday, 10 July 2019

Session 1 (13.00 – 15.00)

Ruby I Session Chair : Aria Hendrawan and Prof. Mudjiastuti Handayani **Track Civil Engineering**

Paper ID	Author	Media	Paper Title
SCI19102	Wilarso Hermanto	Oral Presentation	The Computerization Of Faarfield And Comfaa For The Pcn Value Analysis Of The Runway 13-31 Ahmad Yani International Airport Semarang In 2018
SCI19103	Anik Kustirini	Oral Presentation	The Influence Of Compressive Strength Of Mortar Geopolimer On Addition Of Carbit Waste Ash With Curing Oven System
SCI19112	Bambang Sudarmanto	Oral Presentation	Estimating The Water Infiltration Capability Of The Weathered Volcanic And Alluvial Soils Based On Their Moisture Content: A Case Study In Tembalang District, Semarang City, Indonesia
SCI19116	Bagus Hario Setiadji	Oral Presentation	Laboratory Analysis Of The Effect Of Sulfate In Tidal Water On The Performance Of Asphalt Mixture
SCI19124	Ms. Iin Irawati	Oral Presentation	Models Determination Value of PCE Motor Cycle at Signalized Intersection Base on Driving Behavior for Heterogenous Traffic with Microsimulatiton
SCI19126	Agus Muldiyanto	Oral Presentation	The Effect Of Variation Of Cement Levels On Compression Streght Of Cement Treated Base (ctb)
SCI19140	Agus Muldiyanto	Oral Presentation	Study of the development of tourism airports from the passenger demand side: Case study of Dewadaru Airport, Karimunjawa, Jepara City, Central Java, Indonesia
SCI19131	Supoyo	Oral Presentation	Study Of Using Asphalt Recycling (rap) For Road Passion Layers

Afternoon Coffee Break : 15 Minutes

Day 01 Wednesday, 10 July 2019

Session 1 (13.00 – 15.00)

Ruby II Session Chair : Prof. Ahmed El-Sayed Gaber and Panji Wisnu Wirawan **Track Informatics Engineering**

Paper ID	Author	Media	Paper Title
SCI19105	Siti Asmiatun	Oral Presentation	Augmented Reality Map Implementation For Classification Of Damaged Roads
SCI19106	Whisnumurti Adhiwibowo	Oral Presentation	Briker Server Voip Capability Measurement Over Virtual Local Area Network
SCI19107	Alauddin Maulana Hirzan	Oral Presentation	Internet Of Things Modeling For Public Lighting
SCI19108	Chandra Yogatama	Oral Presentation	Securing Client And Server Connection From Parameter Tampering Using Time Based Hash Encryption
SCI19128	Atmoko Nugroho	Oral Presentation	Smart Door Lock And Automatic Lights Design With Bluetooth Connection Using Android Arduino
SCI19132	Nurtriana Hidayati	Oral Presentation	Bandwidth Management Decision Support System With Hybrid (saw And Ahp) Method Case Study Semarang University
SCI19135	Susanto	Oral Presentation	Design the portable LPG gas leak detection and fire protective device
SCI19136	Agusta Praba Ristadi Pinem	Oral Presentation	Design Automatic System Smart Curtains Using Nodemcu Based on Android

Afternoon Coffee Break : 15 Minutes

Day 01

Wednesday, 10 July 2019
Session 2 (15.15 – 17.15)

Ruby I

Session Chair : Wilarso Hermanto and Agus Muldiyanto

Track Information System, Computer Engineering, Computer Science, Electrical And Informatics Technology, Electrical Engineering

Paper ID	Author	Media	Paper Title
SCI19113	Titin Winarti	Oral Presentation	Feature Selection For Optimization Naive Bayes Algorithm
SCI19118	Saifur Rohman Cholil	Oral Presentation	Best Employee Selection Decision System In Disperindag Province Of Central Java With The Electre Method
SCI19137	Panji Wisnu Wirawan	Oral Presentation	Usability Testing For Multimodal Transportation Application
SCI19121	Muhammad Yusuf Choirullah	Oral Presentation	Methods Of Link Aggregation Traffic With Tunnel Backbone, Bgp, And Mpls
SCI19133	Khoirudin	Oral Presentation	Fuzzy Eas Optimization For Analysis Soybean Production Needs
SCI19134	Ida Udlhiya	Oral Presentation	Goal Detection System Using Image Processing With Labview
SCI19127	Harmini	Oral Presentation	Solar Power Inverter In Photo-voltaics With Full Bridge Systems
SCI19141	Aria Hendrawan	Oral Presentation	Area-Based Segmentation in Brain Scan CT Images for Low Grade Patients Glioma

Day 01 Wednesday, 10 July 2019

Session 2 (15.15 – 17.15)

Ruby II Session Chair : Bambang Sudarmanto and Anik Kustirini

Track Plant Science Engineering, Agricultural Product Technology

Paper ID	Author	Media	Paper Title
SCI19120	Henny Indriyawati	Oral Presentation	Bayes Theorem Method And Web-based Forward Chaining Algorithm In Detecting Tuberculosis (TBC)
SCI19119	Dewi Larasati	Oral Presentation	Study Of The Use Of Heat Treatment In Postharvest Handling Of The Physico-chemical And Microbiological Properties Of Red Chili (capsicum Annum L.)
SCI19145*	Sri Budi Wahjuningsih	Oral Presentation	Effect of Sago Analog Rice and Red Bean Diet of β Cells Pancreas Refinement in STZ-NA Induced Diabetic Rats
SCI19144	Hari Suprapto	Oral Presentation	Study of the Role of CFRP Shear on Increased Bending Capacity of Reinforced Concrete Beams
SCI19143	Lutfi Aulia	Oral Presentation	Effect of Mixed DME In LPG to Flame Stability Characteristic Jet Diffusion Flame

List of Conference Attendees

ID	Attendee	Field of Study	Affiliation
SCI19114	Putri Anggi Soewandi	Civil Engineering	Universitas PGRI Semarang

Track: Agriculture Engineering

Effect of Mixed DME in LPG to Flame Stability Characteristic Jet Diffusion Flame

Lutfi Aulia[1], Riesta Anggarani[2], Emi Yuliarita[3], Edy Susanto[4], I Made Kartika Dhiputra[5]

[1,2,4,5]University of Indonesia, [1,2,3]PPPTMGB 'LEMIGAS'

Abstract

Utilization of LPG (Liquefied Petroleum Gas) as fuel for the agricultural products processing sector and the food industry is in demand because LPG has the characteristics of combustion gases that are cleaner than luquid fuel or other conventional fuels. Until now, the government imported 70% of domestic LPG needs, mostly to meet the industrial and household sectors. DME (Dimethyl Ether) is an alternative fuel that has considerable potential as a substitute for LPG. In addition to being characterized by having fuel characteristics similar to LPG, it can also be produced from biomass and coal, which have large reserves in Indonesia. For initial use, DME can be used as an LPG mixture. In this study an experimental study was conducted on the effect of DME as a mixture of LPG gas on the flame stability characteristics. With variations in the mixture of 10%, 20%, 30%, 40% and 50% by weight, the results of the change in speed stability properties of blow off velocity, lift off velocity and lift off height from the LPG mix DME jet diffusion flame are obtained. In addition, the DME mixture effect shows an increase in the combustion speed of the DME LPG mix.

Keywords: Dimethyl Ether, Flame Stability, Liquefied Petroleum Gas

Track: Agricultural Product Technology

Study of the Use of Heat treatment in Postharvest Handling of the Physico-chemical and Microbiological Properties of Red Chili (Capsicum annum L.)

Dewi Larasati[1], D.A Gunantar[2]

[1,2,3]Semarang University

Abstract

Red chilli is a perishable commodity, so it is necessary to have correct and appropriate post-harvest cultivation. One of the post-harvest handling technologies that can be used to prevent damage is heat treatment. The purpose of this study was to determine the effect of heat treatment on hardness, moisture content, vitamin C levels, and total red chilli moulds. The design of this study was a simple, utterly randomized design with hot water treatment (HWT). The treatment is heat treatment time, namely 0, 10, 20, 30, 40, and 50 minutes. The results of the study showed that the time of heat treatment had a significant effect on water content, Vitamin C, texture and total mould. The conclusion is that the length of time heat treatment can reduce water levels and vitamin C but increases the texture of chilli and inhibit the growth of mould.

Keywords: Heat Treatment, Red ChiliRed

Effect of Sago Analog Rice and Red Bean Diet of β Cells Pancreas Refinement in STZ-NA Induced Diabetic Rats

Sri Budi Wahjuningsih[1], Haslina[2]

[1,2,3]Semarang University

Abstract

Resistant starch has known to be hypoglycemic and hypolipidemic effect by decreasing insulin resistance. One of the products of resistant starch is sago analog rice and red beans. The aim of this study is determining the effect of sago analog rice and red beans in diabetic rats induced by STZ-NA for insulin sensitivity increasing to repairing of pancreatic beta cells. Thirty-five male Wistar rats were divided into 5 groups are the normal group with the standard feed diet (STD), the diabetic group with a standard feed diet (STDD), the diabetic group with magnetic rice (MWRD), the diabetic group with sago analog rice (SARD) and the diabetic group with sago analog rice with the addition of 10% red bean flour (SARKBD). All groups had analyzed dietary interventions, blood glucose levels, insulin levels for HOMA-β and HOMA S indices. After treatment, insulin level of pancreatic was analyzed using IHC staining. In addition, short chain fatty acids (SCFA) analysis was performed in caecum. This study showed that decreasing blood glucose levels shown in SARD (30.19%) and RASKBD (24.09%) group. The HOMA β and HOMA S level in SARD group were 0.83 and 0.54 respectively. Pancreatic β cell number also increase 76,23 in SARD group compare than STDD group. The pool total of SCFA in SARD group was highest among of all groups, as well as the acetate, propionate and butyrate pools respectively. These results indicate that the sago analog rice diet could repair and increase the expression of pancreatic β cells through absorption inhibition mechanisms, insulin sensitivity increasing and the SCFA level alteration.

Keywords: β cells pancreas, diabetic mellitus, insulin sensitivity, red bean, sago analog rice

Track: Civil Engineering

The Computerization of Faarfield And Comfaa for the Pcn Value Analysis of the Runway 13-31 Ahmad Yani International Airport Semarang In 2018

Wilarso Hermanto[1], Bagus Priyatno[2], Putri Anggi Permata Suwandi[3], Andi Sutami[4]

[1,2,3,4]Universitas PGRI Semarang

Abstract

The Airport is an important infrastructure in transportation activities in the world, especially in Indonesia, which is an archipelagic country. In Indonesia air transportation is a supporting factor for economic, social, cultural, industrial and tourism developments. This has led to the importance of the development of aircraft the fleets that are professional and have international standards. To analyze the thickness of the runway according to FAA standards, the ACN-PCN method is the only method determined by ICAO which refers to the FAA AC No 150 / 5320-6E provisions regarding the Airport Pavement Design and Evaluation and KP. No. 93 of 2015. With the completion of the 13-31 Runway International Airport Ahmad Yani Semarang overlay at the end of December 2018, it is necessary to recalculate the Runway Ability to support Aircraft Load Capacity using FAARFIELD and COMFAA so that the value of the 13-31 PCN Runway can be identified can be published.

Keywords: PCN Value, Airport, Runway, Overlay

Estimating the water infiltration capability of the weathered volcanic and alluvial soils based on their moisture content: A case study in Tembalang District, Semarang City, Indonesia

Bambang Sudarmanto[1], Ahmed Gaber[2]

[1]Semarang University,[2]Port Said University

Abstract

Knowledge of soil infiltration capability is very important for planning to mitigate the flooding hazard. The research work of handling the surface drainage and conservation of excess water in the soil needs to be encouraged and continuously developed. The aim of this research is to figure out the pattern of the relationship between infiltration rate and surface parameters which will be easily obtained from radar imaged-based from space. This information is related to the infiltration capacity, the soil saturation, the correlation between saturation when it is flooded and water table. Such infiltration study was carried out in the eastern part of Semarang City, namely The Tembalang District, which is repre-sented by alluvium and weathered volcanic sediments. Three infiltration test points were placed in two volcanic territory and one in alluvium deposits. The method used was the measurement of single ring infiltration and emphasized the measurement of the constant attainment of constant infiltration and a change of water content during infiltration obser-vations. The results are a negative linear correlation between the constant infiltration's time and changes in soil water content in volcanic soil, and a positive linear correlation in alluvium soil. This finding needs to be further tested for soil types in several different lo-cations. Also need to be considered additional test in the form of variable existence of ground water table which later will find linkages between changes in water content, con-stant infiltration time and presence of ground water table.

Keywords: Water Infiltration, Volcanic Soils, Alluvial Soils, Moisture Content

Laboratory analysis of the effect of Sulfate in tidal water on the performance of asphalt mixture

Bagus Hario Setiadji[1], Sri Prabandiyani Retno Wardani[2], Kirana Prasetya Azizah[3]

[1,2,3]Diponegoro University

Abstract

The roads that are often submerged in tidal water have a tendency to a high level of damage. Based on previous research, tidal water could contain various content of chemical elements, however, which kind of the element that has the greatest impact on asphalt mixture required further analyzed. This study aims to evaluate the durability of asphalt mixture against tidal water by conducting a simulation which involves different tidal water sources and Sulfate solutions. To evaluate the durability of the mixtures, durability indices were used. The results showed that the amount of Sulfate in tidal water has a negative impact on the mixture performance, although the impact is still lower than that caused by Sulfate alone in a Sulfate solution. The use of Starbit E-55 polymer asphalt can reduce the negative impact of tidal water up to 45%, although the level of the reduction in strength loss from the use of this kind of asphalt may vary depending on the location of tidal water, amount of decayed-organic/non-organic materials in tidal water, and so on

Keywords: Sulfate, tidal water, asphalt mixture

The Effect Of Variation Of Cement Levels On Compression Streght Of Cement Treated Base (CTB)

Agus Muldiyanto[1], Purwanto[2], Edo Wiguna[3], Muhammad Bagus Satriawan[4]

[1,2]USM (Universitas Semarang),[3,4]Students Of Civil Enginering Faculty,USM (Universitas Semarang)

Abstract

Cement Treated Base is a stable aggregate layer with cement. Materials used between coarse aggregate, ashes and water. The purpose of this study is 1. To obtain compressive strength value corresponding to the specification between 45-55 kg/cm2. 2. To obtain the results of cement addition according to the aggregates that have been added. The method used in Pd T-08-2005 this method can be assisted by using optimum water content. Research results for 1. The strong 7-day press with the addition of 3% cement is 34.21 kg/cm2 2. The 7 days compression strength with the addition of 4.5% cement is 47.51%. 3. The compressive strength of 7 days with the addition of 6% cement is 56.75 kg/cm2.4. compressive strength of 7 days with an additional 7.5% cement is 64.55 kg/cm2. So with this result, effective cement comparison and according to the required specifications is 4.5% between 45-55 kg/cm2.

Keywords: Cement Treated Base, Variation Of Cement Ratio, Compressive Strength.

Study of Using Asphalt Recycling (RAP) For Road Passion Layers

Supoyo[1], Agus Muldiyanto[2], Faizal Mahmud[3]

[1,2]USM,[3]Unissula

Abstract

The development and advancement of technology in making highways is increasing with the creation of many technologies in making roads faster and more efficiently. One of the asphalt recycling technologies is the use of Reclaimed Asphalt Pavement (RAP), which is a used hot mix material resulting from excavation of cold milling mixed with dolomite additives to improve the quality of asphalt to make the asphalt life longer, this method is considered faster and to reduce damage continued in a short time after repairs. The research of recycling asphalt mixture aims to determine Marshall values, VIM values, VMA values and VFB values of each mixing variation. The percentage of dolomite used as a mixture is 2%, 4%, 6%, 8% and 10% of the asphalt weight. Based on the results of the study, it was found that the results of the mixing showed VIM values, and VFB increased when the percentage of the mixture was increased, while the VMA value did not change, so it was concluded that the addition of dolomite had an effect on asphalt filling between the material cavities.

Keywords: Reclaimed Asphalt Pavement (RAP), Dolomite, VIM value, VMA value, VFB value

The Influence of Compressive Strength of Mortar Geopolimer on Addition of Carbit Waste Ash With Curing Oven System

Anik Kustirini[1], Mochammad Qomaruddin [2], Diah Setyati Budiningrum [3], Imania Eka Andammaliek[4]

[1,3]USM,[2,4]UNISNU

Abstract

With the increasing infrastructure development, alternative materials for portland cement are being developed, one of the alternative materials being developed is geopolymer. In this research, fly ash and carbide weld ash will be used as binders or substitute for cement by making cuboidal geopolymer mortar with a size of 5cmx5cmx5cm with 150 specimens. The composition of the material used in this study is 50%: (activator + binder) fine aggregate ratio. And binder ratio 60%: activator 40% (NaOH and Na2SiO3 compared 1: 2). The test method that is carried out is compressive strength. The results of the conclusions are: geopolymer mortar with pure fly ash which has the highest compressive strength of 16.60 MPa, while the geopolymer in the variation of addition of carbide weld ash is 20%, the highest mortar compressive strength is 17.35 MPa.

Keywords: Geopolymer, Compressive Strength, Fly Ash, Carbide Ash, Oven Curing

Models Determination Value of PCE Motor Cycle at Signalized Intersection Base on Driving Behavior for Heterogenous Traffic with Microsimulatiton

Iin Irawati[1], Ahmad Munawar[2], Bagus Hario Setiaji[3]

[1]Semarang University, [2]Gadjah Mada University,[3]Dipenogoro University

Abstract

PCE is a very important quantity for determining traffic flow. While traffic flow is very important in road and intersection performance evaluation. PCE is used to convert the number of vehicles per hour to PCU/hours. Some previous studies have used several variables to determine the PCE amount, including headway, current flow and traffic density, queue discharge flow, speed, saturation flow, vehicle-hours, rainfall intensity, saturation flow and loss time, weather. Gap variable from previous research is characteristic of driving behavior. The driver's characteristics determine the traffic flow models, and homogeneous traffic characteristics are certainly different from heterogeneous. Indonesia is a country that has heterogeneous traffic characteristics, with a large variety of vehicles and undiscipline of driving behavior, this is reflected in the high level of aggressiveness. PCE must be relevant to existing traffic conditions. The value of PCE in Indonesia Highway Capacity Manual must be updated for the accuracy of analysing of performance road or intersection, considering that IHCM 1997 is a processed product of traffic data in 1994 which is certainly different from the present. This study aims to create a traffic simulation model to determine the value of PCE motor cycle based on driving behavior using VISSIM. The location of the research was in Majapahit signal intersection ,Semarang, Central Java. The variables inputted in the tools are the number of vehicles per hour, geometric, cycle time and driving behavior. The outcome indicator is queue length. There are several standard values of driving behavior parameters based on conditions in the field, which are used as model calibration, including average standstill distance = 0.5 m; additive part of savety distance = 0.8 m; multiplicative part of savety distance = 1 m; min headway = 0.5 m; savety distance reduction factor = 0.6. After making the frequency distribution stage, increasing the number of vehicles/hours in every 10%, trial and error PCE value of motorcycles from 0.9 - 1.5 to be applied in IHCM 1997 formulas, the results of PCE motor cycle that give output near the field are 0.15.

Keywords: Signal Intersection, Driving Behavior, Heterogeneous, PCE, Traffic Flow.

Study of the development of tourism airports from the passenger demand side: Case study of Dewadaru Airport, Karimunjawa, Jepara City, Central Java, Indonesia

Agus Muldiyanto[1], M. Handajani[2], Supoyo[3]

[1,2,3]Semarang University

Abstract

Dewadaru Airport Karimunjawa, Jepara, Central Java, Indonesia. It currently has a length of 1200 meters, with Twin Otter aircraft with a capacity of 6-12 passengers. To increase the passenger capacity, it is necessary to develop the airport, especially to increase the length of the runway. It is designed to use ATR 72 aircraft with a capacity of 70 people. The purpose of this study is to predict the number of passengers of 5.10, and the next 15 years of passengers by using linear regression analysis, the analysis of passenger vessel sizes that switch to the aircraft and the combination of both. The result of linear regression analysis at 2023 was 15,343 passengers; 2028 budget 40,028; The 2033 estimate was 101,138, for 2023 passenger ships shifted to an estimated plane of 50,200 passengers; 2028 budget of 70,539 passengers; 2033 estimates 99,118 passengers and the second combined in 2023 is estimated at 65,542 passengers; 2028 budget 110,567 passengers; The 2033 budget is 200,256 passengers. From the results of the analysis of the number of passengers per year, passengers were chosen to switch to the plane with the assumption that the length of the track was developed and the type of ATR 72 - 600 aircraft that required the runway length of 1600 m.

Keywords: Dewadaru, Regression, Runway,Prediction, ATR 72

Study of the Role of CFRP Shear on Increased Bending Capacity of Reinforced Concrete Beams

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Abstract

The occurrence of changes in function, as well as the emergence of defects in the structure need to evaluate the study of the strength of the structure of the building. In order to restore structural strength, improvements can be made so that the structure is able to function as expected. This study aims to determine how much the role of shear CFRP confinement on the flexural strength of reinforced concrete beams. The beam is designed as an over reinforced beam. Observations were made on pure bending spans, which meant that failure did not occur in the shear area. As a control, a normal beam without CFRP treatment with the same material and loading specifications. Various results of research that have been conducted show that the addition of CFRP is able to increase beam flexural capacity up to 45.16%. While the results of this study indicate that the CFRP restraint role is able to increase the bending moment capacity of the beam by 32.38%. Ductility as an indicator of the ability of a structural element to improve also increased by 43.14%..

Keywords: CFRP, restraint, over reinforced, bending capacity, ductility

Intergrading Earth & Disaster Science to Enable Sustainable Adaptation & Mitigation

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Abstract

Coastal cities worldwide are facing the enormous task of becoming resilient to physical, social and economic challenges; in addition to challenges due to climate change. However, our understanding of the major factors contributing to multiple coastal hazards is often incomplete due to the complexity of the problem, data scarcity and lack of research infrastructure for conducting transdisciplinary research. This paper advocates for the establishment of national and international networks of experts to better understand how coastal environments respond to such challenges by combining field experience with cutting edge geospatial technology and data analytics.

Keywords: Earth & Disaster Science, Mitigation

Track: Computer Science

Fuzzy EAS Optimization for Analysis Soybean Production Needs

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Abstract

Determining the amount of production in the field of agriculture is something that can help the work of farmers. When cultivating it based on harvest area and consumption needs of the community so that there is not much left or too much stock in the storage warehouse which causes minimal decay or stock in the warehouse, farmers often miss estimation, because the parameters used are less accurate. With soft computing method, it is expected to get the right optimization regarding the forecasting process to determine the amount of production based on harvest area and consumption needs by using Fuzzy Eas method which is a combination of fuzzy logic and genetics used to find optimal solutions from area and graphics services to improve performance optimal in this case is used to determine the optimal number of production solutions. The data used shows that the existing production from 2010-2015 has many imbalances in terms of soybean production and from 86% of the results of genetic mutations, the scope of this research in Central Java Indonesia, with the amount of soybean production and community soybean consumption that has been optimized , so that in the next generation with a factor of production, existing consumption needs to be developed and understood for the feasibility of an increasingly high production period, so that production needs must be met.

Keywords: production, consumption, agriculture, fuzzy, genetics.

Track: Computer Engineering

Methods Of Link Aggregation Traffic With Tunnel Backbone, BGP, And MPLS

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Abstract

This paper discusses the development of telecommunication system and link aggregation for the backbone of Internet traffic major internet Service Provider (ISP) Maudy Network Semarang City that requires to take internet bandwidth from the upstream server Jakarta to Semarang, this system if compared with a metro rental will require a greater cost and time. because this new communication system was developed. Consisting of two internet sources, two gateway routers and one main router device located in Semarang, last one colocation server in Jakarta. All devices in the configuration to be able to communicate di-rectly using the Tunnel, MPLS, and BGP protocols, so that in the end all communications will pass through the server in Jakarta as well as the link aggregation will add and stabilize the Communication. Based on the system tests, it was found that the results are very good with downtime testing or PING data switching gets the result of 1 Request Time Out (RTO) or 4 seconds, enjoy uninterrupted streaming and browsing, moving average UDP data path 2.5 Seconds, both lanes can be used in balance, this is a solution to create high-ability communication, easy to use and low cost.

Keywords: Tunnel, Link Aggregation, BGP, MPLS, Traffic..

Track: Electrical Engineering

Solar Power Inverter In Photo-voltaics With Full Bridge Systems

Harmini[1], Andi Kurniawan Nugraha[2], Titik Nurhayati[3]

[1,2,3]Semarang University

Abstract

Dewadaru Airport Karimunjawa, Jepara, Central Java, Indonesia. It currently has a length of 1200 meters, with Twin Otter aircraft with a capacity of 6-12 passengers. To increase the passenger capacity, it is necessary to develop the airport, especially to increase the length of the runway. It is designed to use ATR 72 aircraft with a capacity of 70 people. The purpose of this study is to predict the number of passengers of 5.10, and the next 15 years of passengers by using linear regression analysis, the analysis of passenger vessel sizes that switch to the aircraft and the combination of both. The result of linear regression analysis at 2023 was 15,343 passengers; 2028 budget 40,028; The 2033 estimate was 101,138, for 2023 passenger ships shifted to an estimated plane of 50,200 passengers; 2028 budget of 70,539 passengers; 2033 estimates 99,118 passengers and the second combined in 2023 is estimated at 65,542 passengers; 2028 budget 110,567 passengers; The 2033 budget is 200,256 passengers. From the results of the analysis of the number of passengers per year, passengers were chosen to switch to the plane with the assumption that the length of the track was developed and the type of ATR 72 - 600 aircraft that required the runway length of 1600 m.

Keywords: Dewadaru, Regression, Runway,Prediction, ATR 72

Track: Electrical and Informatics Technology

Goal Detection System Using Image Processing With Labview

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Abstract

With the advancement of Digital image processing technology, it can facilitate human life, and many applications that can be applied in various fields, such as in the field of robotics technology. Image processing is an image processing technique that transforms the image of input into another image so that the output has better quality than the input image quality. By utilizing the technology, it is hoped that an application that can capture an object in front of the camera can identify the type of object. In the field of football robots, one of the problems that must be solved to make a robot system is that the camera in the robot is able to recognize the goal well. The camera is used as a detector sensor and the football robot can recognize the goal in the field using only the camera. With this problem, the study designed a goal detection system based on Digital image processing technique.

Keywords: Image Processing, Thresholding, Goal

Track: Informatics Engineering

Augmented Reality Map Implementation for Classification of Damaged roads

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Abstract

Road detection is one of the most discussed topics in recent research because public institutions such as hospitals, police stations, schools, etc are connected by road. Therefore, research on road detection become more important research theme to be developed in stages. This study tries to apply the method of naive Bayes to classify damaged roads using augmented reality maps. Data is taken from the application accelerometer in previous research. This study focused on the implementation of an augmented reality map for the classification of damaged road conditions generated from the accelerometer application.

Keywords: Road, Detection, Augmented Reality, Maps

Briker Server Voip Capability Measurement Over Virtual Local Area Network

Susanto[1], Whisnumurti Adhiwibowo[2], Alauddin Maulana Hirzan[3], Osamah Ibrahim Khalaf[4]

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Abstract

Telephones are a communication technology that is still used everywhere. In the company, having a telephone is a must to facilitate communication from outside parties to the company. Telephone communication technology that used to only use simple cable connectivity developed into a device with better connectivity and has better voice clarity known as Voice over IP (VoIP). In using VoIP a special device is needed that can do VoIP services using a computer network. BrikerServer is one of the devices that can exchange VoIP data, and can also bridge communication with PSTN networks, the internet, and the company's local network to exchange information. In exchanging information, of course, the Briker server and network topology have limits on how much data traffic can flow. In this study, Briker's server will be tested for its ability to provide VoIP services in a Virtual Local Area Network (VLAN) network which is divided into three (3) regions based on existing divisions. Mathematically, VoIP data traffic in this network can be calculated, so that it can be used to conclude whether the Briker server can handle this VoIP traffic.

Keywords: VLAN, VoIP, Briker, Performance, Analysis

Internet of Things Modeling for Public Lighting

Bernadus Very Christioko[1], April Firman Daru[2], Whisnumurti Adhiwibowo[3], Rastri Prativi[4]

[1,2,3,4]Universitas Semarang

Abstract

Public street lighting conditions (PJU) currently in some areas still do not meet the standard criteria set by the National Electricity Company (PLN), because of the behavior of people who install street lighting wildly. The activity caused the power consumption to be used uncontrolled, which resulted in not being monitored the amount of power released for the street lighting overall. As an effort to deal with the problem, it is necessary to create an electronic public street lighting system (e-PJU), this e-PJU system is a combination of modern programming technology with microcontroller technology and technology networking IP-based, which will be implemented on the device PJU. This tool uses LED lights as an energy-efficient lighting medium. The e-PJU model built is also equipped with a monitoring and security system, where the system can provide information on real-time lighting conditions such as the location of e-PJU, the condition of the temperature of the device and the status of the lights on or off. Model E-PJU will also be integrated with android applications as a media for monitoring data in real-time, in the application there is also a data log activity e-PJU feature, to facilitate the PLN in conducting maintenance regularly.

Keywords: IoT; MQTT; PJU; Sensors;

Securing Client and Server Connection from Parameter Tampering Using Time Based Hash Encryption

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Abstract

Security is a basic requirement for online software. It prevents attack delivered to the system, such as Parameter Tampering. Parameter Tampering works by altering or creating a malicious package to run by the server and causing harm to the system using Hijacking and Brute Force Attack. We need a network service security system to protect from Hijacking and Brute Force Attack to prevent Parameter Tampering. Time-based Hash Encryption is chosen to protect. Its output is used as an authentication key and reordering parameter. Those 2 aspects serve as protection against Hijacking and Brute Force Attack effectively preventing Parameter Tampering.

Keywords: Network Services Security, Parameter Tampering, Hash Encryption

Smart Door Lock and Automatic Lights Design with Bluetooth Connection using Android Arduino

April Firman Daru[1], Susanto[2], Aria Hendrawan[3], Atmoko Nugroho[4]

[1,2,3,4]Universitas Semarang

Abstract

In the era of technology that has developed, humans are increasingly busy in carrying out their activities. Thus, many tools are created that can help and facilitate human work. In this problem, an obstacle arises in regulating electronic devices that are at home, for example, such as automation of doors and home lighting. From the background above, it is designed a tool for door automation and home lighting using Bluetooth so that it can be controlled using an android application. In designing this system combines hardware and software, such as the Arduino UNO R3 as the main controller, and is supported by other modules such as the HC-05 Module, Relay, Df Mini Player, Speaker, and servo motors. This tool can turn on the lights, and lock the door automatically which can be controlled using Android. The benefit of making this final project is to make this tool expected to be able to help and simplify human work in controlling electronic lights and door lock by using Android easily without having to turn on the lights by pressing the switch or locking the door manually, and can improve home security.

Keywords: Automatic door, automatic light, Arduino UNO R3, Bluetooth, Android

Bandwidth Management Decision Support System with Hybrid (Saw and Ahp) Method Case Study Semarang University

Whisnumurti Adhiwibowo[1], Basworo Ardi Pramono[2], Saiful Hadi[3], Nurtriana Hidayati[4]

[1,2,3,4]Universitas Semarang

Abstract

The development of increasing internet technology requires very large bandwidth, as well as the University of Semarang which has the second largest number of PTS students in Central Java, of course, requires a large capacity bandwidth as well. The Ministry of Research, Technology and Higher Education's standards state that for bandwidth required, students are above 0.75 Kbps. This need is also for the use of darling lectures to be conducted at Semarang University. But with limited quota bandwidth, a decision support system was created to determine management allocations Bandwidth in each Faculty at the University of Semarang, which will be prioritized to get the quota bandwidth according to needs. This Decision Support System was built with a hybrid method, namely the AHP (Analytic Hierarchy Process) and SAW (Simple Additive Weighting approach) where the AHP method is used for the weighting process. The use of this method is to reduce decision maker subjectivity, while the SAW method is used for ranking processes, the result is the final preference value. The best alternative is chosen based on the highest preference value. The results obtained from this study is the determination of the priority scale for faculties that have bandwidth requirements based on needs so there is no mistake in determining the allocation of the amount of bandwidth.

Keywords: SPK, Hybrid, AHP, SAW, bandwidth

Design the portable LPG gas leak detection and fire protective device

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[1,2,3]Universitas Semarang,[4]Universiti Malaysia Pahang

Abstract

LPG (Liquefied Petroleum Gas) is an alternative fuel in the form of gas which produces much fewer missions than pollution produced by oil fuels. However, LPG gas fuel has a greater risk of exploding than fuel oil, which should be carefully used. There have been many cases of LPG gas cylinder explosions, specially LPG gas cylinders that occurred in Indonesia. Therefore, several security systems have been developed to address these issues such as LPG gas leak detection sensor. The aim of this paper is to design a portable gas leak detective and fire protective device, which used the open-source Arduino as processing microcontroller. The prototype device has been designed, fabricated and tested, which offers a solution method for LPG tubes. This device is equipped MQ02 sensor and flame module, which used to detect the gas leak and fire condition. In addition, it is connected with a water pump to extinguish the fire source, when the buzzer makes a warning alarm. Furthermore, the device is sufficient method to detect and protect the LPG gas leak and fire conditions, which is strongly expected to make contributions in LPG gas application purposes.

Keywords: LPG, protective device, automation, leak detection, fire condition,

Design Automatic System Smart Curtains Using Nodemcu Based on Android

Atmoko Nugroho[1], Aria Hendrawan[2], Agusta Praba Ristadi Pinem[3], Saifur Rohman Cholil[4]

[1,2,3,4]Universitas Semarang

Abstract

Technological developments in Indonesia always run from time to time. Technology is an important element in the development of a country, as a developing country there are many new technologies that we feel that aim to facilitate human work without us knowing technology has become an integral part of our lives. Sunlight brings many benefits to humans, Window is one of the building elements that functions as a place for sunlight to enter into the house. But if the light that enters too much will have an adverse effect. Curtains have a role as a controller of sunlight entering the room. Not only that, the curtain can also maintain the privacy of the occupants of the house. In order to meet the daily needs of many people who spend time outside the home especially to work so that small activities such as opening or closing curtains and others are often forgotten. Therefore the use of technology for households is very necessary. One solution to overcome this problem is to design and implement smart curtains by using NodeMCU, where when there is sunlight the curtain will automatically open and in the dark (no sunlight) the curtain will automatically close to make it efficient time. In addition we can also open and close the curtains from a distance by utilizing a Wi-Fi connection with our Android Smartphone.

Keywords: NodeMCU; smart curtains; Android

Area-Based Segmentation in Brain Scan CT Images for Low Grade Patients Glioma

Aria Hendrawan[1], Atmoko Nugroho[2], Saifur Rohman Cholil[3], Agusta Praba Ristadi Pinem[4]

[1,2,3,4]Universitas Semarang

Abstract

Glioma is a primary brain tumor disease that often attacks adults. Glioma is basically related tocells nerve and other tissue infiltrations. Based on the level of spread in the brain, this disease is divided into two parts, namely high grade glioma and low grade glioma. The research that discusses this disease is quite a lot but research related to early detection of diagnosing glioma is still limited. In this study, we developed an area-based segmentation method on CT scans of brains infected with low grade glioma. The initial process needed to produce area-based image segmentation is the initial process of the image (preprocessing) using a threshold, then the image segmentation process uses fuzzy classification with three entropies. We have consulted with a neurologist to get information about parts of the CT scan of the brain infected with glioma. The final result of this study was segmentation of the CT scan of the brain infected with glioma. The results of this segmentation can be used by specialist doctors to detect early glioma disease.

Keywords: Glioma; Low Grade Glioma; Image Segmentation; Fuzzy

Track: Information System

Feature Selection For Optimization Naive Bayes Algorithm

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Abstract

Naive Bayes is one of the data mining methods used in the classification of text-based documents. The advantages of this method is simple algorithms with low calculation complexity. However, there is a weakness in the Naive Bayes method where the nature of the independence of the Naive Bayes feature cannot always be applied so that it will affect the level of accuracy of calculations. Therefore, the Naive Bayes method needs to be optimized by giving scale using Gain Ratio. However, weighting on Naive Bayes raises problems in calculating the probability of each document, where many features that do not represent the tested class appear so that there is a misclassification. Therefore, the weighting of Naive Bayes is still not optimal. This paper proposes the optimization of the Naive Bayes method using weighting Gain Ratio which is added by the method of selecting features in the case of text classification. The results of this study indicate that the Naive Bayes optimization method using feature selection and weighting Gain Ratio produces an accuracy of 94%.

Keywords: Naive Bayes, Weighted Naive Bayes, Gain Ratio, Feature Selection.

Best Employee Selection Decision System in Disperindag Province of Central Java With the Electre Method

Saifur Rohman Cholil[1], Agusta Praba Ristadi Pinem[2], Aria Hendrawan[3], Titis Handayani[4], Atmoko Nugroho[5]

[1,2,3,4,5]Semarang University

Abstract

The best employee selection can be said to be a valuable asset because it contributes and guarantees to develop the company. The purpose of the election is to develop a decision support system (SPK) in selecting the best employees. This study uses questionnaire data from the Department of Trade and Industry (Industry and Trade) Provincial Jawa T puffing for the calculation process from quantitative to qualitative amended with the ELECTRE method. The criteria for research reference are service orientation (C1), integrity (C2), commitment (C3), discipline (C4) and collaboration (C5). In each criterion have sub-criteria. The selection of the best employees using ELECTRE can lead to better performance of selected employees and motivate the spirit of performance for other employees. Employees with the greatest value are employees who are selected to be the best employees.

Keywords: Electre, Linked scale, Best employee

Usability Testing for Multimodal Transportation Application

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Abstract

Multimodal transportation is an attempt to use more than one transportation mode. In the previous study, we have developed the Travio application, an application to help find the right mode of public transportation to reach certain destinations in Semarang city, Indonesia. The Travio application is expected to be used by the general public, but the application has not yet been tested for usability. This article discusses usability testing using the System Usability Scale (SUS) method in the Travio application. Some respondents were selected and asked to do the assigned tasks. Respondents were asked to provide application values with the SUS questionnaire standard. The final result of the SUS score obtained is 49.375 which means that the Travio application requires several improvements to improve its usability.

Keywords: usability testing, system usability scale, multimodal transportation

Track: Plant Science Engineering

Bayes Theorem Method and Web-Based Forward Chaining Algorithm in Detecting Tuberculosis (TBC)

Henny Indriyawati[1], Prind Triajeng Pungkasanti[2], Wahyu Septiawan[3]

[1,2,3]Semarang University

Abstract

Tuberculosis (TBC) is an infectious disease that is easily transmitted through the air caused by the Mycobacterium Tuberculosis germ. Tuberculosis mostly attacks human organs such as the lungs, kidneys, intestines, clear glands and so on. Based on data from the RSUD Ungaran a lot of diseases that occur in the city of Ungaran itself is Tuberculosis (TBC), from the data of the community who went to Ungaran Hospital. The Neonatal Mortality Rate in Semarang Regency in 2014 was 8.15 per 1,000 KH as many as 74 cases. An expert system is a system that seeks to adopt human knowledge to computers so that computers can solve problems as is usually done by experts. This expert system is the Bayes Theorem method for calculating the probability value and the Forward Chaining method to produce a conclusion. The results of this study were to develop a Tuberculosis Disease Diagnosis (TBC) Expert System Using the Bayes Theorem Method and Forward Chaining Algorithm in Ungaran City. This expert system is useful for diagnosing Tuberculosis which can make it easier for sufferers to diagnose Tuberculosis early to get proper treatment, as the hope for the need for information on Tuberculosis symptoms can be obtained quickly and precisely at that time.

Keywords: Bayes Theorem, Forward Chaining Algorithm, Expert System, Tuberculosis (TBC).

FUTURE EVENTS

July 11 - 12, 2019
International conference on Agrotechnology, Business and Socio-Economic (ICABSE)
www.icabseconference.com

July 17 – 18, 2019
International Conference on IT, Communication and Technology for Better Life (ICT4BL)
http://ict4bl.researchsynergy.org

July 25 – 26, 2019
International conference on Islamic Education Studies and Social Science (ICISS)
http://icissconference.com

August 5 – 6, 2019
International conference on Public Administration, Policy, and Government (ICPAG)
http://icpagconference.com

August 15 – 16, 2019
International conference on Law, Human Rights, and Cultural Studies (ICLAHS)
http://iclahs.com

August 26 – 27, 2019
AIBEA: Australia Conference on Interdisciplinary Business, Economic and Administrative Science Research
http://aibea.com

September 3 – 4, 2019
ICOACI: International Conference on Anti-Corruption and Integrity
http://icoaci.com

September 11 – 12, 2019
International Conference on Industrial Technology (ICONIT)
http://iconit.com

September 16 – 17, 2019
ICIOM: International Conference on Industrial and Operation Management Research
http://iciom.com

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Semarang, July 10, 2019