

# ROES-2017



**Seoul South Korea  
December 2-3, 2017**





**ROES - Seoul, South Korea**

International Conference on Research Optimization in field of  
Economics and Social Sciences

**December 02-03, 2017**

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**Book of abstracts**

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## **ORGANIZING COMMITTEE**

Mr. Ryan Aminullah  
Conference Coordinator

Mr. Metha Shahi  
Conference Coordinator

Mr. Leon Yap  
Conference Coordinator

Ms. Petrel Qiu  
Conference Coordinator

## CONFERENCE CHAIR MESSAGE

**Dr. Hungxiz Li**

International Conference on “International Conference on Research Optimization in field of Economics and Social Sciences” serves as platform that aims to help the scholarly community across nations to explore the critical role of multidisciplinary innovations for sustainability and growth of human societies. This conference provides opportunity to the academicians, practitioners, scientists, and scholars from across various disciplines to discuss avenues for interdisciplinary innovations and identify effective ways to address the challenges faced by our societies globally. The research ideas and studies that we received for this conference are very promising, unique, and impactful. I believe these studies have the potential to address key challenges in various sub-domains of social sciences and applied sciences.

I am really thankful to our honorable scientific and review committee for spending much of their time in reviewing the papers for this event. I am also thankful to all the participants for being here with us to create an environment of knowledge sharing and learning. We the scholars of this world belong to the elite educated class of this society and we owe a lot to return back to this society. Let’s break all the discriminating barriers and get free from all minor affiliations. Let’s contribute even a little or single step for betterment of society and welfare of humanity to bring prosperity, peace and harmony in this world. Stay blessed.

Thank you.

**Dr. Hungxiz Li**  
**Conference Chair**  
**ROES - 2017**

## Conference Schedule

**DAY 01 Saturday (December 2, 2017)**

**Venue: Room 1**

09:00 am – 09:30 am	Welcome Reception & Registration
09:30 am – 09:40 am	Opening Ceremony
09:40 am – 09:50 am	Welcome Remarks – <b>Ms. Petrel Qiu</b> – Conference Coordinator Roes
09:50 am – 09:55 am	Introduction of Participants
09:55 am – 10:00 am	Group Photo Session
10:00 am – 10:30 am	Grand Networking Session and Tea Break



**DAY 01 Saturday (December 2, 2017)**  
**Session I (10:30 am – 12:30 pm)**  
**Venue: Room 1**  
**Session Chair: Mr. Leon Yap**

**Track A: Business, Economics, Social Sciences and Humanities**

<b>S-127-108</b>	Analysis of Bond Rating and Its Influencing Factors	Nurfauziah, Dra. MM
<b>S-127-108A</b>	Analysis of Bond Rating and Its Influencing Factors	Rintan Nuzul Ainy
<b>S-127-109</b>	Role Play Learning Model to Improve the Competence of Customer Service for the Student of Finance and Banking Vocational School	Aidha Trisanty
<b>S-127-117</b>	Weekend Effect Analysis on Daily Stock Return LQ45 in Indonesian Stock Exchange Period 2013-2015	Mellisa Fitri Andriyani Muzakir
<b>S-127-119</b>	Managing and Improving Service Quality in Higher Vocational Education in Indonesia	Sita Dewi Kusumaningrum
<b>S-127-120</b>	The Influence of Brand Trust and Service Quality on Customer Preferences of Online Transportation Services Users	Rr. Siti Muslikhah
<b>S-127-120A</b>	The Influence of Brand Trust and Service Quality on Customer Preferences of Online Transportation Services Users	Selva
<b>S-127-122</b>	Investigation of Customer Satisfaction and Loyalty toward Local Fast Food Restaurant in Indonesia	Anas Hidayat
<b>S-127-122A</b>	Investigation of Customer Satisfaction and Loyalty toward Local Fast Food Restaurant in Indonesia	Arief Darmawan

**Track B: Engineering, Technology & Applied Sciences**

<b>S-127-104</b>	Construction of Machine Tool Health Condition Monitoring System by Vibration Trajectory Method	Shang Chih Lin
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**Lunch Break (12:30 pm – 01:30 pm)**

**DAY 01 Saturday (December 2, 2017)**

**Session II (1:30 pm – 3:30 pm)**

**Venue: Room 1**

**Session Chair: Mr. Leon Yap**

**Track A: Business, Economics, Social Sciences and  
Humanities**

<b>S-127-103</b>	The Malaysian Parliamentary Debate and the Change of Malaysian Standard Time, 1981-1982	Hamdan Bin Aziz
<b>S-127-112</b>	The Tourism-Led Economic Growth Hypothesis and the Nexus between International Tourism Revenue and Economic Growth in Saudi Arabia	Hussain Mohammed A Alobaid
<b>S-127-113</b>	Energy - Growth Nexus: Evidence from Developed and Developing Countries	Zaheer Abbas
<b>SUS-1127-104</b>	Influences of Enterprise Content and Infrastructure on Product Value	Yi Ju Yang
<b>SBTM-127-ANI102</b>	Excessive Speculation from Shariah Perspective and Its Regulation on House Prices: A Malaysia Experience	Nor Fahimah Mohd Razif
<b>SBTM-127-ANI110</b>	Economic Cycles and Urban Growth with Land Value and Land Rent	Prof. Wei-Bin Zhang
<b>SBTM-127-ANI124</b>	The Social Isolation of Asian International College Students in America: an Investigation and Proposal for a Social Intervention Program	Mrs. Jooshim Kim
<b>SBECI-127- CEAS101</b>	Properties of Etching SiO <sub>2</sub> using Inductively Coupled Plasma with Faraday Cage	Mr. Min Sung Kwon

**Tea Break 3: 30 pm to 3:45 pm  
(Closing Ceremony)**

## LIST OF CONFERENCE ATTENDEES

The following Scholars/ practitioners/educationist who don't have any paper presentation, however they will be attending the conference as delegates & observers.

<b>Sr. no</b>	<b>Official ID</b>	<b>Name</b>	<b>Affiliation Details</b>
1	<b>SBTM-127-ANI117A</b>	Mr/Elsayed Said Ibrahim Haggag	AL Nesma Factory, Egypt
2	<b>SBTM-127-ANI130A</b>	Egwudike Denis Obomegbulem	Universal Investment and Development Company, Nigeria
3	<b>S-127-127A</b>	Md Abdul Motaleb	Socio Economic Development Association for Disabled (SEDAD), Bangladesh
4	<b>S-127-128A</b>	Nazma Akter	Socio Economic Development Association for Disabled (SEDAD), Bangladesh
5	<b>S-127-129A</b>	Md Hasanuzzaman Hasan	Socio Economic Development Association for Disabled (SEDAD), Bangladesh

## DAY 02 Sunday (December 3, 2017)

### City Tour and Shopping Day

All respective guests are free to conduct their own sightseeing and tour. The second day of the event is reserved for this

**TRACK A: BUSINESS, ECONOMICS, SOCIAL  
SCIENCE & HUMANITIES**

# Influences of Enterprise Content and Infrastructure on Product Value

Yi Ju Yang<sup>1\*</sup>, Yi Han Yang<sup>2</sup>, Chia Lin Chan<sup>3</sup>, Chih Chin Yang<sup>4</sup>

**Abstract** The research results of this study clearly show a positive relationship between the infrastructure and content of enterprises. The two 2-3-6 value chain sub-systems can be categorized according to six factors based on added-value in the industry. The six categorized factors in the value chain are defined by experiment, experience, and knowledge in terms of the content of intellectual capital, and by finance, human resources, and facility in terms of the infrastructure of intellectual capital. The results of our quantitative analysis indicate that content variables significantly influence the production value of an enterprise in terms of patent permissions, research reports and research papers. The results of our qualitative analysis indicate that the semiconductor industry should establish an intellectual capital strategy for how to link work knowledge (i.e. experiments), product knowledge (i.e. experience) and intellectual property (i.e. knowledge) using tangible assets including financial costs, human resources and facility costs.

**Keywords:** Contents; Intellectual Capital; Knowledge; Value Chain

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## The Malaysian Parliamentary Debate and the Change of Malaysian Standard Time, 1981-1982

Hamdan Bin Aziz<sup>1</sup>, Siti Fatimah Mohd Noor<sup>2</sup>, Razi Yaakob<sup>3</sup>

**Abstract** This paper attempts to identify the reasons why (former) Prime Minister of Malaysia, (Tun) Mahathir Mohamed proposed to change the Malaysian Standard Time on the 8 hours ahead based on Greenwich Mean Time (GMT) and coordinated with official times for (East Malaysia) Sabah and Sarawak effective January 1, 1982. Previously, Peninsular Malaysia was 7 ½ hours ahead while Sabah and Sarawak has been using 8 hours ahead of GMT. Using analytical textual method, this paper formulated the content of the House of Commons hansard texts on 21 December 1981 and the House of Lords convened on 18 December 1981. The findings revealed that the ½ hour time difference between the Peninsular and Sabah and Sarawak affected of working hours especially in early and ending of time. The approval of the Malaysian Standard Time Act successfully standardized the official communication time between the Peninsula with Sabah and Sarawak as well as establishing integration between the two regions. Time of Sabah and Sarawak was chosen as the Standard Malaysia time as it was found to be most appropriate in terms of daylight savings as well as minimal disruption to the comfort of the people.

**Keywords:** Mahathir, Malaysian Standard Time, Greenwich Mean Time (GMT), Sabah, Sarawak, Peninsular Malaysia, House of Commons, House of Lords, integration

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## Analysis of Bond Rating and Its Influencing Factors

Nurfauziah, Dra. MM<sup>1</sup>, Rintan Nuzul Ainy<sup>2</sup>

**Abstract** This research is conducted to analyse the determination of bond rating and factors influences the company's bond rating listed in Indonesia Stock Exchange. Factors used in this research are company size, company growth, liquidity, profitability, leverage, and bond maturity.

Research samples are fourteen companies listed in Indonesia Stock Exchange period 2011-2015. Data used in this research are in the form of an annual report for each company and secondary data collected from Indonesian Capital Market Directory (ICMD) obtained through the Indonesia Stock Exchange. The hypothesis was tested using multiple linear regression. The hypothesis testing indicates that size and growth of the company have significant positive effect on bond rating, whereas leverage and bond maturity have negative effect on bond rating. However, liquidity and profitability have no effect on bond rating.

**Keywords:** Bond Rating, Company Size, Company Growth, Liquidity, Profitability, Leverage, And Bond Maturity

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## **Role Play Learning Model to Improve the Competence of Customer Service for the Student of Finance and Banking Vocational School**

Aidha Trisanty\*

**Abstract** The development of sharia banking in Indonesia has become future career opportunities for vocational students of sharia banking to work in the industry. However, the implementation of ASEAN Economic Community has also been the challenge for the graduates to win the competition for employment. Thus, a good learning strategy should be implemented to make the graduates ready to work and have competitive advantage. This research will discuss about role-play learning model for students to improve their competence on customer service as one of working units in the finance and banking industry. This research is a descriptive research that will collect data through observation by considering the performance criteria of the students during the practicum of customer service competence based on the Indonesian National Work Competence Standard.

**Keywords:** Role Playing, Vocational, Sharia Banking, Competency, Customer Service

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# The Tourism-Led Economic Growth Hypothesis and the Nexus between International Tourism Revenue and Economic Growth in Saudi Arabia

Hussain Mohammed A Alobaid\*

**Abstract** International tourism is one of the main services in the economy. Positive contributions from tourism are attributed to its provision of hard currency, creation of employment opportunities and accumulation of physical capital. This paper investigates the relationship between International Tourism Revenue (ITR) and Gross Domestic Product (GDP) in Saudi Arabia, and tests for tourism-led economic growth (TLEG) by using time series Granger Causality analysis. It confirms that international tourism has a positive and statistically significant impact on the economic growth in Saudi Arabia, thus confirming the theoretical assumptions of the TLEG hypothesis and the findings of existing empirical studies. We find enough evidence that supports this hypothesis and the results indicate that it is consistent with the TLEG hypothesis of the positive relationship that exists between international tourism revenue (LITR) and real LR GDP. The findings show that elasticity of LITR is 0.56, which identifies a 1% increase in international tourism revenue will lead to economic growth increase in the range 0.56% in the short term.

**Keywords:** Tourism-Led Economic Growth, Economic Growth, Granger Causality, Saudi Arabia

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## Energy - Growth Nexus: Evidence from Developed and Developing Countries

Zaheer Abbas<sup>1\*</sup>, Dr. Tahir Mahmood<sup>2</sup>, Dr. Eatzaz Ahmed<sup>3</sup>

**Abstract** The paper intends to seek Energy-Growth relationship for which 78 countries as a sample have been selected for the years (1980-2014). These countries have been classified into two groups- developing and developed countries. Mean group and pooled mean group estimation techniques (Panel ARDL Model) have been applied to discover the aforementioned relationship keeping in view the time period (short and long run). The empirical evidence attained through the models (Panel ARDL) has certified the liaison between the variables. The results discovered the significant effect of energy use on economic growth in both categories of the countries. The implication of the study is that the increased energy use is the strong determinant of economic growth in the countries. However, to what extent energy consumption has brought effects on economic growth varies across the groups. Moreover, per - capita energy consumption in developed countries has higher contribution than that of the developing countries in economic growth. This paper is likely to add substantial contribution to the energy literature and specifically helps the policy makers in chalking out the policies to manage the energy related issues particularly in developing countries.

**Keywords:** Energy Consumption, Economic Growth, Panel data, Mean Group, Pooled Mean Group, developing and developed countries

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# Weekend Effect Analysis on Daily Stock Return LQ45 in Indonesian Stock Exchange Period 2013-2015

Mellisa Fitri Andriyani Muzakir\*

**Abstract** This study has the title: "Weekend Effect Analysis on Daily Stock Return LQ45 in the Indonesian Stock Exchange Period 2013-2015". This study was conducted to determine the difference between Monday and Friday returns for daily stocks recorded successively in the LQ45 index period 2013-2015. The hypotheses of this study is (1) H1: Monday has the lowest stock returns compared to all the other trading days and (2) H2: Friday's stock returns are higher than all other trading days. The period of this study is February 2013 to July 2015 with a total of 25 companies. The data used is the closing price on daily stock. The hypothesis used regression analysis with two equations for the constant of Monday and the constant of Friday by t test compared with t table. The results shows that the Monday constant trading day value was negative at -0.004 with a significance value of  $0.000 < 0.05$ , so it can be concluded that Monday-trading day had a significant effect on stock returns. Friday got the constant trading day value of -0.476 with a significance value of  $0.634 > 0.05$ , so it can be concluded that the Friday-trading day had no significant effect on stock returns. The highest value was on Wednesday.

**Keywords:** Return, Weekend Effect, LQ45

**Keywords:** Personality, Job Stress, Job Satisfaction, Turnover Intention

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## **Managing and Improving Service Quality in Higher Vocational Education in Indonesia**

Sita Dewi Kusumaningrum\*

**Abstract** The Government of Indonesia has put more attention on the development of higher vocational education in Indonesia. This is due to the goal of more empowering higher vocational education in Indonesia so that it can provide graduates who are ready to work and meet the needs of industry as well as community. Based on that, higher vocational education should be able to provide education services for their students as needed. Higher vocational education should also be able to manage and improve its service quality. This paper aims at presenting the perception of students on service quality of a higher vocational program in Indonesia and the efforts should be conducted by the program to manage and improve its service quality based on government regulation and lesson learnt from similar vocational program. Previous research on the evaluation of service quality in the case study is presented as the basis to explore the efforts should be conducted by the program in managing and improving service quality in a higher vocational education in Indonesia.

**Keywords:** service quality, higher vocational education, Indonesia

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# The Influence of Brand Trust and Service Quality on Customer Preferences of Online Transportation Services Users

Rr. Siti Muslikhah<sup>1\*</sup>, Selva<sup>2</sup>, Rindang Matoati<sup>3</sup>

**Abstract** The innovation in emerging digital market presents new challenges for some business in Indonesia. Business in online transportation is one of such innovation that brings solutions in transportation problems. Citizen prefers the transportation that brings good service, therefore many online transportations arise in Indonesia such as Uber, Gojek, and Grab. The purpose of this study is to analyze the influence of brand trust, service quality on customer preference. Data processing was performed using Analisis of Moment Structures (AMOS). The study was conducted in Yogyakarta area which only Gojek transportation online dominated in online transportation. The analysis data used Structural Equation Modelling (SEM) analysis. The results showed only service quality significantly influence the customer preference of Gojek.

**Keywords:** Brand Trust, Service Quality, Customer Preference, Online Transportation

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## **Investigation of Customer Satisfaction and Loyalty toward Local Fast Food Restaurant in Indonesia**

Anas Hidayat<sup>1</sup>, Arief Darmawan<sup>2</sup>, Aprilia Putri Adanti<sup>3</sup>

**Abstract** This paper aimed to analyze the influence of customer's satisfaction on customer's loyalty toward local fast food restaurant in Indonesian. There were variables involved as consideration such as perceived service quality, perceived product quality, and perceived price fairness. Samples of this study were customer of local fast food restaurant in Yogyakarta. Data was collected by using convenience sampling technique that analyzed 200 respondents. The method used questionnaires and processed by using Structural Equation Modelling- AMOS. The results of this study indicated that, there is a significant influence between the perceived service quality and customer satisfaction. Second, there was significant influence between perceived service quality and customer loyalty. Third, there was significant influence between perceived product quality and customer satisfaction. Fourth, there was significant influence between perceived product quality and customer loyalty. Fifth, there was significant influence between perceived price fairness and customer satisfaction. Then, there was significant influence between perceived price fairness and customer loyalty. In addition, there was significant influence between customer satisfaction and customer loyalty. However, perceived price fairness apparently mostly influence for Indonesian consumers on being loyal toward local fast food restaurant.

**Keywords:** Perceived Service Quality, Perceived Product Quality, Perceived Price Fairness, Customer Satisfaction, Customer Loyalty, Local Fast Food Restaurant

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# The Social Isolation of Asian International College Students in America: an Investigation and Proposal for a Social Intervention Program

Mrs. Jooshim Kim\*

**Abstract** While the influx of Asian international students coming to America for higher education continues to grow interminably, the problem of social isolation of this population remains quite concerning (Digestive statistics, 1999; Lee & Rice, 2007; Wu, Garza, & Guzman, 2015; Zhao et al., 2005). Given that this phenomenon is currently an on-going social issue, there is still significant work to be done in order to fully understand and accurately analyze this problem, not to mention obviating possible adverse health-related effects experienced by the ostracized. This paper investigates the three potential causes of the social isolation of Asian international college students: social stigmatization, conflicting cultural identity, and the entrenchment of social identity. An intervention program is introduced consequently, which bases its strategies upon the aforementioned theories. The program aims to tackle the issues of the negative impacts parted by the stigmatization of the racially minor Asian international student groups, to minimize the gap between the cultural construals that different racial group members possess, and to alter the students' focus on their social identities from an ethnic group-oriented one to a racially diverse, intervention group-oriented one. Such intervention program is expected to not only help the Asian international students adjust more quickly and effectively to American college environments, but also to positively affect and transform the entire student population to become a more understanding and an actually "racially diverse" group of people.

**Keywords:** Investigation, Intervention, Education

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# Economic Cycles and Urban Growth with Land Value and Land Rent

Prof. Wei-Bin Zhang\*

**Abstract Abstract** The purpose of this study is to examine existence of business fluctuations in an urban growth model of endogenous wealth and land value with residential distribution over a linear city by Zhang (2017). Zhang synthesized the Solow growth model and the Alonso model. This paper generalizes Zhang's model by allowing all the time-independent parameters to be time-dependent. It examines the relationship between growth, urban structure and land value with different time-dependent exogenous shocks. We simulate the model to demonstrate existence of equilibrium points, motion of the dynamic system, and oscillations due to different exogenous shocks.

**Keywords:** Periodic Shocks; Business Cycles; Economic Growth, National Utility, Land Rent, Land Value, Residential Location

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## **Excessive Speculation from Shariah Perspective and Its Regulation on House Prices: A Malaysia Experience**

Nor Fahimah Mohd Razif<sup>1\*</sup>, Noor Sakinah Samsul Kamal<sup>2</sup>,  
Ashraf Md. Hashim<sup>3</sup>

**Abstract:** Speculation is ordinarily understood as a mean to purchase a good for a later resale, rather than for use. In other words, speculation is an act of selling a good, temporarily, with the intention of gaining profit from later re-purchase due to the price changes. Speculators play a very important role in the marketplace in term of adding liquidity and stabilizing the price fluctuation. However, speculators who partake in excessive speculation can resulted to destabilizing effect on the financial system. Excessive speculation that leads to zero-sum outcomes are prohibited in Islamic perspectives on finance and condemned in conventional finance. Other than trades in derivatives, commodities, bonds, equities or currencies, speculator is also looking forward to making profit in potential real estate namely in residential housing sector rather than commercial, industrial or agricultural. It is undeniable that speculation has its macroeconomic importance as it's contributes in smoothening a stagnant property market. However, speculation also creates an artificial market price trends that leads to the benchmarking of housing price. In fact, although housing is a key driver of business cycle but excessive speculation in property market were also the causes of financial crisis in 2008. Therefore, this article explores on how Government of Malaysia initiates to curb the excessive speculation by introducing a better policy of banking credit system/mortgage/housing loan, housing tax and provision of affordable housing for low and middle-income class.

**Keywords:** Excessive Speculation, Property, Islamic Finance, Housing Price

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## Properties of etching SiO<sub>2</sub> using Inductively Coupled Plasma with faraday cage

Min Sung Kwon<sup>1\*</sup>, Sung Il Kim<sup>2</sup>, Byeong Kwon Ju<sup>3</sup>

**Abstract** In general, the etching using ICP is etched perpendicular to the surface. Generally, the etching using ICP used in the semiconductor manufacturing process etches the surface perpendicular to the surface. However, with faraday cage, it is possible to perform an Angled etching and a different etching rate and etching profile than when using a cage. Change the gas flow rate, ICP and CCP power and observe the results.

**Keywords:** Properties, Inductively Coupled, Plasma

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**TRACK B: ENGINEERING & TECHNOLOGY,  
COMPUTER, BASIC & APPLIED SCIENCES**

# Construction of Machine Tool Health Condition Monitoring System by Vibration Trajectory Method

Shang Chih Lin<sup>1\*</sup>, Yennun Huang<sup>2</sup>

**Abstract** The aim of this study is to construct a mechanism with self-testing health status through data analysis techniques, which makes the performance of machine tools more intelligent. Firstly, the operation information is retrieved by the three-axis acceleration sensor, and the axial vibration signal is further converted to the plane of the axial trajectory, and the feature model is defined by the statistical method as the important criterion of state monitoring. The results of the actual data analysis show that the proposed method can effectively monitor the health of the machine tool in order to avoid the economic losses caused by machine failure and casualties.

**Keywords:** Machine Tool, Vibration Signal, Statistical Methods, Axial Trajectory, Condition Monitoring System.

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# Vehicle Types Classification Using Deep Neural Network Techniques

Jian-Da Wu<sup>1\*</sup>, Yi-Cheng Luo<sup>2</sup>

**Abstract** Traffic flow is one of the most important information elements in intelligent traffic transportation engineering. This study developed a vehicle type classification system using a neural network technique. The architecture of this study is divided into two parts, vehicle pictures are collected first, divided into motorcycles, sedans, recreation vehicles, buses and trucks to build a contrast database. The image processing techniques included median filtering and edge detection used to de-noise to improve recognition efficiency. The second stage is processing the previous data stage into the system identification database. All data created by the database were then input into the classifier for calculation. The classification recognition rate was finally obtained. This study uses the generalized regression shallow learning neural network (GRNN), deep neural network (DNN) and convolutional neural network (CNN) classification algorithms. The results show that vehicle classification using the convolutional neural network is better than that obtained with the deep neural network using the restricted Boltzmann machine. Both types of neural networks produced much higher classification than the generalized neural network. The deep learning technique was shown better than the shallow learning approach in this study.

**Keywords:** Vehicle Classification System, Deep Neural Network, Convolutional Neural Network, Generalized Regression Neural Network, Image Processing.

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