

YEAR	TITLE	ABSTRACT	REMARK
2011	The Use of Java Swing's Components to Develop a Widget	<p>Widget is kind of application that provides a single service such as a map, news feed, simple clock, and battery-life indicators. It is developed to facilitate user interface (UI) design. A user interface function may be implemented using different widgets developed on different UI platforms. This article presents a comprehensive review on Java Swing as a platform to develop widgets. It is a platform that is generally used in various applications, such as in desktop, web browser, and mobile phone. Furthermore, we also describe UI elements of Java Swing's components used to establish widgets. At the end, this article discusses comparison between Java Swing and several commonly used UI platforms.</p>	<p>IJHCI Volume: 1, Issue: 4, Pages : 95-119, Publication Date: January / February, ISSN (Online): 2180-1347 Revised Date 31-01-2011 Published Date 08-02-2011, Publisher CSC Journals, Kuala Lumpur, Malaysia http://www.cscjournals.org/csc/manuscript/Journals/IJHCI/volume1/Issue4/IJHCI-17.pdf</p>
2011	Face Component Extraction Using Segmentation Method on Face Recognition System	<p>Biometric technology has been frequently utilized in identifying and recognizing human components. This technology identifies human's unique and static body parts, such fingerprints, eyes, and face. One of the most biometric technologies which are widely used is facial recognition. The identification and recognition of a human face utilize the face components' processing and analysis. This technique consists of determining face components' region and their characteristics, which establishes the role of individual component in face recognition.</p> <p>This research develops a system that defines face components by determining the distance of face components (i.e.: the eyes, nose, mouth) and other facial components. This process conducted on a frontal single still image to acquire the components. Distances between components are determined by detecting the based skin color, cropping to normalize face region, and extracting eyes, nose, and mouth components. This research utilizes 150 Indonesian face samples and has successfully determined the face components'. From the experiment we conclude that the determination of face components and face components' distances can be used to identify a face as a subsystem of a face recognition system. Test of uniqueness to 150 samples has succeeded. The result indicated that eight face component distances give better result than the previous one, which only applied three components distance. The test of uniqueness with eigenspace showed the existence of different characteristic for every face image.</p>	<p>Journal of Emerging Trends in Computing and Information Sciences, Publication : February 2011, Volume 2 No. 2, pp 1-6, ISSN (Online) : E-ISSN 2218-6301/ ISSN 2079-8407, Publisher : ARPN Publishers Office No. 9, Qadri Plaza, New Mal, Kurri Road, Opposite Shahzad Town Islamabad-45500, Pakistan http://www.cisjournal.org/Archive_February_2011.aspx</p>
2011	Case Study: The Condition of Ubiquitous Computing Application in Indonesia		<p>Bookchapter in Ubiquitous Computing, ISBN 978-953-307-409-2 edited by: Eduard Babkin, Publisher: InTech, Publishing date: February 2011, pp. 215-224, http://www.intechopen.com/articles/show/tit</p>

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2011	Sistem Informasi Geografis Berbasis Web Tentang Penyebaran Dan Pertumbuhan Industri Kota Tangerang Dengan Arcview 3.3 Dan Mapserver	Tangerang is an industrial city spread in many district area. Industrial growth in Tangerang indicates cycle in case of labor and investment. Geographical information system of Tangerang industry that grow and spread is made using Arcview 3.3, MapServer supported by Chameleon framework and MySQL. A geographic information system (GIS), geographical information system, or geospatial information system is any system that captures, stores, analyzes, manages, and presents data that are linked to location(s). Arcview 3.3 is used to process map's digitations, consist of district border digitations in Banten province, district, map, streets and center point of industrial spread in Tangerang. MapServer application is used for admin to show map in the web with Chameleon framework as media storage and MySQL is used to add and delete data in GIS web of Tangerang. Information presented include name of company, streets, district, type and investment value. This GIS expected for public to know easier in sending information of Tangerang Industries	Jurnal Ilmiah Ilmu Komputer, Vol. 7 No.2 Maret 2011, UPH, Jakarta, pp . 237-246
2011	Towards Ubiquitous Computing in Indonesia : Automated Bus System	The traffic jam becomes the biggest problem in urban area especially in Jakarta as the capital city of Indonesia. This is due to inadequate facilities of public transportation so, people prefers to use the private vehicles. The government has given the solution to enhance that but it is still not effective and it made the situation of traffic jam became worst. This paper proposed the Automated Bus System (ABS) to improve the existing system and enhance the traffic jam problem. This bus system has the ability to ride on his own without relying on any human driver. It can recognize any obstacles and avoid any collision using stereo vision technology. RFID technology is used to improve the accuracy. Still, this whole system is monitored by human operators. If there is any failure beyond the ability of system, the human operators could recognize the problem.	2nd International Conference on Advanced Measurement and Test (AMT 2011), Nanchang, China 24 – 26 Juni 2011, ID Paper 443 2011 International Conference on Photonics, 3D-Imaging, and Visualization, edited bt Egui Zhu, Proceedings of SPIE, Vol 8205, ISBN 9780819488473, SPIE, Bellingham, WA, 2011, 8205 32

2011	Automated Face Detection and Feature Extraction Using Color FERET Image Database	Detecting the location of human faces and then extracting the facial features in an image is an important ability with a wide range of applications, such as human face recognition, surveillance systems, human-computer interfacing, biometric identification, etc. Both face detection and face features extraction methods have been reported by the researchers, each with a separate process in the field of face recognition. They need to be connected through adapting the face detection results to be the input face in the extraction process by turning the minimum face size results from the detection process, and the way of face cropping process from the extraction process. The identification and recognition of human face features that has developed in this research is the combination of face features detecting and extracting process in 150 frontal single still face images from color FERET facial image database with additional extracted face features and face features' distances.	International Journal of Computer Science & Information Security – IJCSIS, Vol. 9 No.6, June2011, ISSN 1947-5500, Paper 26051128, pp. 313 – 318
2011	Information Visualization for Tourist and Traveling in Indonesia	These days, many developing countries, especially island nations such as Indonesia would try to increase productivity in tourism by trying to improve facilities and services to the tourists and travelers. With so many beauty and diversity in Indonesia, we should see this potential and create a container that can help the people in the world to see the natural beauty found in this country. If this can be realized it will cause a positive impact for both parties, especially governments in the tourist attraction region. However, it is still cannot be realized until today due to the absence of a facility-based of information visualization that can assist travelers in obtaining information about tourist attractions in Indonesia. This paper tries to display a web-based concept of tourism services that can help the tourists in getting the information, location and also the shortest path to reach a tourist destination.	Advances in Computing and Communications, Part II First International Conference, ACC 2011, Kochi, India, July 22-24, 2011. Proceedings, Part II, Series: Communications in Computer and Information Science, Vol. 191 Abraham, A.; Lloret Mauri, J.; Buford, J.; Suzuki, J.; Thampi, S.M. (Eds.) 2011, ISBN 978-3-642-22713-4 ,pp. 130--137.
2011	The Smart Goal Monitoring System	In the current era of rapid technology development, many researchers compete each other to make an automated and integrated system. Since soccer is a favorite sport of all ages, a goal monitoring system is very needed, especially goal detection. The goal monitoring system generates fair play and avoids human error on soccer match. It will be very useful to help referee work. The system runs through sensor, image processing, and final decision. Sensor as object reader will activate the camera at many angles. Combining Circle Hough Transform (CHT) with real-time Color Ball Tracking produces a progressive method to process ball detection. The referees use collaboration tool to get the information. Hence, the referees can be collaborated each other to decide a goal on the match better.	Advances in Computing and Communications, Part II First International Conference, ACC 2011, Kochi, India, July 22-24, 2011. Proceedings, Part II, Series: Communications in Computer and Information Science, Vol. 191 Abraham, A.; Lloret Mauri, J.; Buford, J.; Suzuki, J.; Thampi, S.M. (Eds.) 2011, ISBN 978-3-642-22713-4, pp. 138--145.

2011	Web Based Virtual Agent for Tourism Guide in Indonesia	<p>The development of tourism sector in Indonesia is increasing rapidly, judging from the number of local and foreign tourists which is always growing every year. The rapid development of technology is also very influential in the development of this tourism sector, for example using the web to provide information on tourism in Indonesia, where only display text and images and also not interactive. So, an application system of virtual intelligent agent that connects human and computer is created. It makes an intelligent and interactive tour guide. This paper tries to present Smart Indonesian Tourism Agent (SITA) as visual tour guide. This is a web based information system that provides to access location of tourism in Indonesia. This application uses A.L.I.C.E server and Artificial Intelligence Modeling Language (AIML) interpreter. Hence, the information generated in the web can be displayed in text, visualization, image, and the chat box for questions.</p>	<p>Advances in Computing and Communications, Part II First International Conference, ACC 2011, Kochi, India, July 22-24, 2011. Proceedings, Part II, Series: Communications in Computer and Information Science, Vol. 191 Abraham, A.; Lloret Mauri, J.; Buford, J.; Suzuki, J.; Thampi, S.M. (Eds.) 2011, ISBN 978-3-642-22713-4, pp. 146--153.</p>
2011	Studi Analisis Citra Digital Hutan untuk Pemantauan dan Penghitungan Laju Perubahan Area	<p>Hutan, “paru-paru” dunia, sebuah kawasan yang ditumbuhi pepohonan/ tumbuhan lain yang lebat; berfungsi sebagai penampung CO₂, habitat hewan, pelestari tanah dan merupakan aspek biosfer bumi paling penting. Perusakan hutan (deforestasi), dengan cara pembalakan liar, pembakaran hutan untuk membuka ladang baru, dan sebagainya, tidak mudah dicegah/ dideteksi aparat. Dari total luas hutan di Indonesia yang mencapai 180 juta hektar hanya sekitar 23 persen, setara dengan 43 juta hektar saja masih terbebas dari deforestasi sehingga masih terjaga dan berupa hutan primer. Beberapa cara untuk memantau kondisi hutan, khususnya kondisi kerusakan hutan, misalkan melalui pesawat udara (seperti helikopter), maupun dengan teknologi penginderaan jauh, seperti satelit. Upaya pemantauan memerlukan penguasaan teknologi observasi bumi dan pembangunan jejaringnya. Untuk memantau perubahan tutupan lahan, Indonesia memanfaatkan citra satelit Landsat. Teknologi canggih saat ini dapat melakukan akuisisi data hingga mampu menghasilkan data citra permukaan bumi. Demikian pula metode pengolahan data citra satelit untuk perubahan area hutan, namun masih terus dikembangkan agar memberikan hasil optimal. Tulisan ini merupakan studi awal analisis citra hutan untuk mengembangkan metode pemantauan dan perubahan area hutan menggunakan metode segmentasi yang ada di pengolahan citra. Dari representasi warna citra digital hutan, diharapkan akan didapat metode yang sesuai untuk menentukan dan mengidentifikasi perubahan area hutan</p>	<p>Prosiding Seminar Nasional dan Expo Teknik Elektro 2011 - SNETE 2011, Jurusan Teknik Elektro, Fakultas Teknik, Universitas Syiah Kuala (FT-Unsyiah) dan Prodi Teknik Elektronika Industri, Politeknik Aceh, ISSN 2088-9984, pp C 1 - 6</p>

2011	Implementasi MPRL dan Hough Transform Untuk Segmentasi dan Ekstraksi Fitur Pada Citra Gaya Berjalan	<p>Gaya berjalan manusia unik, mempunyai karakteristik yang berbeda-beda dan memiliki kemampuan yang tinggi membedakan seseorang sehingga muncul penelitian analisis “gait”. Sistem pengenalan ini memetakan titik-titik dari tubuh manusia. Teknologi ini lebih maju dibandingkan teknologi pengenalan yang dikenal saat ini. Tahapan pengolahannya “gait” dimulai dari segmentasi, ekstraksi hingga pengenalan. Paper ini membahas segmentasi dan ekstraksi fitur gaya berjalan. Metode Thinning dengan algoritma Most Prominent Ridge Line (MPRL) untuk membentuk kerangka tulang (skeleton) dari manusia. Hasil berupa citra skeleton digunakan untuk ekstraksi fitur gaya berjalan melalui analisis anular (sudut yang dibentuk bagian kaki saat berjalan dari samping). Metode untuk ekstraksi fitur adalah transformasi Hough. Fitur yang dihasilkan dikelompokkan menurut jarak dan sudut. Pengelompokkan ini menentukan lokasi dari fitur pada suatu citra skeletonisasi. Proses berikutnya menghitung jarak antara fitur dan sudut yang dibentuk antar fitur. Ada sepuluh fitur yang didapat. Empat fitur merupakan kelompok jarak yaitu jarak kaki depan sampai tumit kaki belakang, tangan bagian depan sampai poros tengah dada, tangan bagian belakang sampai poros tengah dada dan tangan bagian depan sampai tangan bagian belakang. Enam fitur lainnya merupakan hasil pengukuran sudut yaitu lutut kaki depan, pergelangan kaki depan, pergelangan kaki belakang, lutut kaki belakang, sikut lengan depan dan sikut lengan belakang.</p>	<p>Prosiding Seminar Nasional dan Expo Teknik Elektro 2011 - SNETE 2011, Jurusan Teknik Elektro, Fakultas Teknik, Universitas Syiah Kuala (FT-Unsyiah) dan Prodi Teknik Elektronika Industri, Politeknik Aceh, ISSN 2088-9984, pp C 37 - 43</p>
2011	Otomasi Pendeteksian Posisi dan Luas Kanker Paru Pada Citra CT-Scan	<p>Lung cancer is a disease that requires serious treatment to save the life of a patient. For these needs, medical workers need the support of accurate information. Currently the most widely performed is the analysis of the presence of lung cancer is to use a CT-Scan image. Visually, this image of advantages besides the picture quality is much better than X-ray image, is also able to provide information on the possible location of lung cancer and can provide a snapshot of the volume of the cancer itself. However, the analysis manually is laborious and requires a relatively long time. And so we need the help of computers and digital image processing in its processing automatically. This study aims to develop algorithms that can automatically detect areas of suspected lung cancer with pulmonary reconstructed to obtain three-dimensional images (3D). For that reason this paper will elaborate on the development of algorithms that can automatically detect areas of suspected lung cancer.</p>	<p>Prosiding Seminar Nasional dan Expo Teknik Elektro 2011 - SNETE 2011, Jurusan Teknik Elektro, Fakultas Teknik, Universitas Syiah Kuala (FT-Unsyiah) dan Prodi Teknik Elektronika Industri, Politeknik Aceh, ISSN 2088-9984, pp C 48 - 52</p>