

YEAR	TITLE	ABSTRACT	REMARK
2009	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. This research develops a system that defines face components by extracting the components and determining the distance of such components (i.e.: eyes, nose, mouth) and other facial components. Such process is 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's distances give better result than the previous research, which only applied three components distance. The test of uniqueness by using eigenspace shows the existence of different characteristic for every face image.</p>	<p>Submitted to and accepted in The First International Conference on LiDAR Technology and Remote Sensing Applications (LiDAR 2009), Heilongjiang University, Harbin CHINA, January 5 - 8, 2009</p>
2009	Building Mail Server Using Zimbra Collaboration Suite 5.0.2 In Operating System Centos 5.0	<p>The idea of e-mail brings this world into the revolution in digital information. Today, e-mail is a communication tool which is very popular. In order to send and receive e-mail, it needs a server which has e-mail server service. This application usually calls Mail Transfer Agent (MTA). One of MTA that usually used is Zimbra. This research tries to implement a mail server Zimbra which install in operating system Centos 5.0. It begins by installing CentOS in computer and then builds a Domain Name Server (DNS) that includes Mail Exchange (MX) which its setup with BIND Application. Testing is done by Setting Account in Administration and makes a communication with e-mail.</p>	<p>Scientific Journal : Informatika & Komputer, Vol. 14, No. 1, April 2009, Universitas Gunadarma, ISSN : 0853-8638, pp. 65 - 72</p>

2009	Study Case: Distributed Groupware and Collaborative Web Agents	<p>Although groupware and collaborative web agents have been researched during the last few years, but this combination have not been widely researched. Groupware applications would seem to have a lot of benefit by leveraging off of web service standards, one of them is support web computing to support access with web browsers. Whereas the goal of Web Computing has been supported group work on the web, web services support for groupware which has the goal to provide interoperability between many groupware systems. Besides that, web search tool is also supported by groupware system but the previous web search tool does not utilize previous search experiences of others to improve performance for the current user. In this paper, we present a collaborative web agent designed to enable across-user collaboration in web search and recommendation. We use our distributed collaborative filtering (CF) algorithm based on a P2P overlay network of autonomous agents.</p>	<p>Proceeding of 2009 WRI World Congress on Software Engineering, Vol I, IEEE Computer Society, USA, 2009, pp 195 - 198</p>
2009	Secure Mobile Agent System in Peer-to-Peer Networks: A Review of Security Mechanisms Based on Several Security Issues	<p>Peer-to-peer(P2P) technology can be naturally integrated with mobile agent technology in Internet applications, taking advantage of the autonomy, mobility, and efficiency of mobile agents in accessing, processing event securing data. In P2P, giving permission to client who could accessed data is needed to reduced client's worrying of prevent any stealing private data. Under this assumption, in this paper, we address the problem of protecting mobile agent system in P2P networks. Some approaches of security mechanisms and techniques are then discussed.</p>	<p>Proceeding of 2009 WRI World Congress on Software Engineering, Vol I, IEEE Computer Society, USA, 2009, pp 212 - 216</p>
2009	Case Study: The Condition of Ubiquitous Computing Application in Indonesia	<p>Generally, people, especially in developing countries, does not realize that they are in third of computer revolution era. They are in the era of ubiquitous computing, which mean that they can interact with the computer everywhere and anytime, not just sitting in front of the PC (one person many computers). Furthermore, the social and political challenges of the ubiquitous computing era will be characterized by an increasing dependence on technology, control over the information to which everyday objects are linked, and the protection of privacy. In this paper, we present the study about the condition of ubiquitous computing application in Indonesia. We divide the application of ubiquitous computing in Indonesia into three parts, i.e. ubiquitous mobile application, ubiquitous web application, and ubiquitous payment system application. Hopefully this paper could become the knowledge about the ubiquitous computing application in Indonesia.</p>	<p>Proceeding of 2009 WRI World Congress on Software Engineering, Vol I, IEEE Computer Society, USA, 2009, pp 260 - 263</p>

2009	Hyperbolic and Bifocal Browser: Web and File Browser	<p>The ambiguity of browser definition is the idea of this paper. Browser is not only used to access internet pages, but actually it is a program that lets us look through a collection of data. Now, the questions are where the collection of data were stored and what kind of data supported by the browser.</p> <p>There are several kinds of browser, but we are focusing on two kinds of browser, hyperbolic and bifocal browser, based on its visualization technique.</p>	<p>Proceeding of 2009 WRI World Congress on Software Engineering, Vol I, IEEE Computer Society, USA, 2009, pp 244 - 246</p>
2009	Simulasi Sistem Pengontrol pH Nira pada Pembuatan Gula Menggunakan Metode Anfis	<p>Proses pemurnian nira merupakan salah satu tahapan yang penting dalam pembuatan gula. Proses ini bertujuan untuk menghilangkan sebanyak mungkin zat bukan gula dari nira mentah. Bejana sulfitasi sebagai objek atur (<i>plant</i>) digunakan sebagai tempat untuk melakukan proses pemurnian, yaitu dengan mencampurkan nira dengan gas SO₂. Pengontrolan pH pada bejana sulfitasi sangat penting, karena pH ini akan berpengaruh pada kualitas gula yang dihasilkan. Dalam proses ini, pH yang diinginkan adalah sebesar 7,2. Kontrol logika <i>fuzzy</i>, dalam hal ini <i>Adaptive Neuro-Fuzzy Inference System</i> (ANFIS), merupakan alternatif yang dapat digunakan untuk mengendalikan pH pada bejana sulfitasi. Perancangan pengontrol ANFIS bertujuan untuk meminimasi <i>error</i> dari pH keluaran sistem dan meningkatkan kemampuan sistem dalam merespon gangguan yang diberikan, sehingga pH yang dihasilkan sesuai dengan <i>setting point</i> yaitu 7,2. Dari hasil simulasi dan pengujian sistem, pengontrol ANFIS berhasil mengurangi tingkat kesalahan (<i>error</i>) dibandingkan sebelum menggunakan pengontrol ANFIS dan mampu meningkatkan kehandalan sistem dalam mengatasi gangguan yang terjadi pada sistem.</p>	<p>UG Jurnal Publikasi Ilmiah UG, Vol.3 No.07, 2009, ISSN : 1978 – 4783, pp. 22 – 24</p>