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Authors: Sagar Vairagar, Shubhangi Vairagar, Shyam Sunder Gupta

Paper Title: Efficient Peer to Peer Content Sharing using Wi-Fi

Abstract: As mobile environment is becoming popular; it becomes very effective and quick way of sharing user contents between users. This content sharing using Peer to peer scheme is limited due to the lesser distance factor and continuous availability of communication medium. Whenever large file size transfer is required, it requires more time and limitation on radius. Additionally content sharing is in plain format without any security considerations. Peer-to-peer networks offer several advantages over traditional client-server networking models like lack of connectivity to reliable hosts or servers and the use of inexpensive communication channel. Peer-to-peer network model has become popular in the wired broadband environment but not yet been effectively adapted to the mobile network environment. Many researchers are currently proposing and developing new P2P schemes for mobile environments with different wireless communication protocols. They are significantly adapted into applications such as the sharing of large files like multimedia and DB files between mobile devices. The peer-to-peer model based on mobile environment having several challenges like the limited on device processing power, limited memory, wireless data bandwidth, and available battery energy. With the proposed a peer-to-peer protocol, these specific constraints are addressed. This system also investigates the feasibility of a practical implementation of a peer-to-peer file sharing model of android smart phones using Wi-Fi technology. This includes an analysis of impacted performance by various variables that can be dynamically controlled in the protocol. Proposed work is done on leading Android platforms and found various optimal strategies which include minimizing the upload and download ratio to conserve battery life effectively, using flexible file segments to increase throughput, and decrease memory overhead.

Keywords: Bluetooth, Wi-Fi, Peer-to-peer communication, wireless communication.

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Paper Title: Performance of Heat Pipes under Different Inclinations and Working Fluids

Abstract: For various applications of heat pipes are widely used according to heat conductivity capacity of working fluid. Based on the heat pipe capacity, heat pipes used in cooling electronic industry for controlling temperature of electronic parts. Some applications need to apply heat pipes at various inclinations for cooling purpose. So need to study heat pipes at various inclinations for best results in working condition. Here we study different heat pipes at various inclinations using different working fluids for heat pipe. Among various fluids, methanol as working fluid establishes best result at high and low inclination. The configuration of evaporator section heated with hot water provided inside evaporator jacket and condenser section cooled with liquid at atmospheric passed inside condenser jacket.

Keywords: Performance of heat pipes, heat conductivity, heat pipes, cooling electronic industry, heat pipe, methanol as working fluid.
Keywords: heat pipe, working fluid, inclination, screen mesh, phosphorus bronze...

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Authors: Yogesh Ramdas Mahulkar, C. M. Sedani
Paper Title: Study of Parameters Affecting the Thermal Performance of Heat Pipe

Abstract: The heat pipes are widely uses in many applications specially for cooling of electronic part industry and heat transfer industry. The need to study the capacity of heat pipe which changes according to applications and for better identification of the heat pipe for special application. Here we study the unlike heat pipes using dissimilar diameter, wire mesh layer and adiabatic section for diverse application of heat pipe. The heat pipe identified for use in special application with respect to its capability and limitation of heat pipe. Some heat pipe results in use for high capacity, low and high inclination, also according to limitations of heat pipe such as capillary limit, entrainment limit. The result detect the double wrapped screen wire mesh affords better result for each pipe diameter and adiabatic section. Also some modify in size of heat pipe diameter and adiabatic section have better than other heat pipe as changes observed in capillary limit and entrainment limit.

Keywords: heat pipe, capillary limit, entrainment limit, wrapped screen mesh, adiabatic section

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Authors: Karen Niña P. Escosura, Ma. Margarita V. Ortega, Marlen Joyce H. Tuazon, Rovilyn L. Carta, Roselito E. Tolentino
Paper Title: Real-Time Detection of Single-Text Character Using the Integration of Extremal Region Filtering and Connected Component Filtering

Abstract: Nowadays, among all the contents in images, text information is the most significant value, may it be in a documented text or in a real-world scene. Text detection and recognition in an image is an important task in image analysis. Due to different properties, text detection is a challenging part in an image where textual content are very important. The previous study by Neumann and Matas limits the text detection and recognition in at least three characters. To extend the detection and recognition, especially of single text characters, the proposed solution is to integrate the two methods, Extremal Region Filtering and Connected Component Filtering with Tesseract OCR Engine. Single-text character candidates are filtered by the Connected Component Filtering, wherein the regions extracted and region features from the two stages of Extremal Region Filtering are considered. With structural analysis, connected components with equal value and similar stroke width and stroke orientation are considered single-text character candidates. Character candidates are recognized by the Tesseract OCR engine.

Keywords: connected component, extremal region, single-text, Tesseract

References:
5. **Authors:** Siti Norasmasi Surip, Siti Ayuni Hamka
   **Paper Title:** Hybrid-Biodegradable Film Made From Polylactic Acid
   **Abstract:** In this experimental study, the biodegradability of PLA/EFB film with two different mixings; with and without lemongrass fibers (LG) were investigated by the landfill degradation. PLA/EFB film without the presence of lemongrass fibers showed the highest significance of weight loss compared to the samples with the presence of lemongrass fibers. The highest weight loss percentage recorded in PLA:EFB:LG was in ratio 3 which is 8.42%. Meanwhile, in PLA:EFB, the highest weight loss percentage was recorded in ratio 3 (32.05%) and the lowest was in ratio 4 (19.22%). Ratio 1 acted as the comparison parameter in both composites mixing. Four different ratio of PLA/EFB showed significance improvement in Young’s modulus with ratio 4 had the highest reading (1492.2 MPa) and ratio 2 with the lowest reading (1021.1 MPa). In MOR, ratio 2 exhibited the highest reading (30.14 MPa) while ratio 4 with the lowest reading (9.49 MPa).
   **References:**

6. **Authors:** A. Akilan, M. Boojith, R. G. Sree Krishna, V. Vijayanand
   **Paper Title:** Productivity Improvement by Lean Techniques in a Small Scale Industry
   **Abstract:** In our project, “Productivity Improvement by Lean Techniques,” undertaken in Unirols Airtex (P) Ltd, Coimbatore, the core objective is to improve the production capacity of the industry. In order to meet the demand one of the lean manufacturing tools 5S (Sort, Set in order, Shine, Standardize and Sustain) has been implemented successfully to ensure that the workspace is tidy, ergonomically efficient and capable of repeatable, quality output to achieve better efficiency. In addition to this technique, we also analyzed and optimized the layout of the industry using the software VIP-PLANOPT 2006 resulting in the improvement of overall productivity which helps the industry in meeting the demand.
   **Keywords:** Lean tools, 5S, layout optimization, productivity.
   **References:**

7. **Authors:** Juan Ochoa Aldeán, José Cuenca Granda, Byron Solórzano Castillo, Julio Romero Sigcho
   **Paper Title:** Implementation of A Long Distance Radio Link using Low-Costhardware
   **Abstract:** In this experimental study, the biodegradability of PLA/EFB film with two different mixings; with and without lemongrass fibers (LG) were investigated by the landfill degradation. PLA/EFB film without the presence of lemongrass fibers showed the highest significance of weight loss compared to the samples with the presence of lemongrass fibers. The highest weight loss percentage recorded in PLA:EFB:LG was in ratio 3 which is 8.42%. Meanwhile, in PLA:EFB, the highest weight loss percentage was recorded in ratio 3 (32.05%) and the lowest was in ratio 4 (19.22%). Ratio 1 acted as the comparison parameter in both composites mixing. Four different ratio of PLA/EFB showed significance improvement in Young’s modulus with ratio 4 had the highest reading (1492.2 MPa) and ratio 2 with the lowest reading (1021.1 MPa). In MOR, ratio 2 exhibited the highest reading (30.14 MPa) while ratio 4 with the lowest reading (9.49 MPa).
   **References:**

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**Czech Technical University.**

present the feasibility of the radio link through Radio Mobile Software, and the results using the PING command.

**Keywords:** WiLD, IEEE 802.11, DD-WRT, Radio Mobile.

**References:**