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1.	**Authors:**	**Pankaj Prajapati, Alok Mishra, P.K.Dwivedi**	
	Paper Title:	**Automated Guided Vehicles (Agv) for Material Movement in Plants & Warehouses**	
	Abstract: The American Society of Safety Engineers (ASSE) defined AGVs as Machines without drivers that can move along pre-programmed routes, or use sensory and navigation devices to find their own way around, Vehicles that are equipped with automatic guidance systems and are capable of following prescribed paths, driverless vehicles that are programmed to follow a guide path. The AGV robot described here is a PIC microcontroller based, and is developed with three degrees of freedom. (Light following, wall following & pit avoidance capability).The robot contains the USB 2.ocompliant PIC 18F455o microcontroller, motors, sensors, wheels, battery, etc. The robot uses four IR sensor modules and two LDR circuits. ALL the sensors of the robot are precise and sensitivity can be varied. **Keywords:** PIC 18f455o, LDR Circuit, USB interface for live programing , ir transceiver, motor driver. **References:** 1. The Basics of Automated Guided Vehicles". AGV Systems. Savant. 5 March 2006 2. "Guidance options for AGVs" Jervis B. Webb Company, 2007. 3. "Inertial (Magnet)Navigation" Archived 2016-10-21 at the Wayback Machine Egemin Automation Inc., 2014. 4. *"Specifications for Platforms" (PDF).* 5. AGV Drive and Steering Options Archived December 7, 2011, at the Wayback Machine Transbotics Corp., 2009 6. *Olmi, Roberto (2011). Traffic Management of Automated Guided Vehicles in Flexible Manufacturing Systems. Ferrara (Italy): University of Ferrara.* 7. Sonar sensor and mounting". University of Birmingham. 5 March 2006 8. Hybrid AGVs" Archived 2014-03-29 at the Wayback Machine. Egemin Automation Inc., 2014 9. Common AGV Applications: Raw Material Handling" JBT Corporation. 18 March 2009 10. Work in Process Movement with AGVs" JBT Corporation. 18 March 2009 11. Pallet Handling AGVs" Archived 2014-02-02 at the Wayback Machine JBT Corporation. 18 March 2009.	**1-4**
2.	**Authors:**	**C.P. Patidar, Yogesh Katara, Meena Sharma**	
	Paper Title:	**Hybrid News Recommendation System using TF-IDF and Similarity Weight Index**	
	Abstract: As the usage of internet is increasing, we are getting more dependent on it in our daily life. The Internet plays an essential role to simplify our tight schedules. In such tough lives, it is very important to stay aware of current affairs. Now for different people coming from different backgrounds and professions, the preferences are different too. Here come Data mining techniques in the picture, which gives us "Recommender system" as the output, capable of delivering more relevant and worthy outcomes. Newspapers are the basic obligation asked by almost every person to stay updated and aware of the world. But as we observe that nowadays, various solutions are been developed to convert paper news system to digital news and raise the bar of the quick news. And that's how News Recommender systems are have made an important place in our fast running lives.This research paper has investigated the News Recommendation solution right from its core, including the importance, performance, and improvement suggestions. This paper talks about enhancing the performance of states solution by using modified Term Frequency-Inverse Document Frequency (TF-IDF) algorithms. Proposed solution advocates the usage of JAVA technology which reflects fruitful results in the final graphs of accuracy, precision, and F-score. Here, BBC dataset has been used for comparison study purposes. **Keywords:** Associative Calculus, BBC Dataset, News Recommendation, TF-IDF. **References:** 1. Neeraj Raheja, V.K.Katiyar," International Journal of Computer Science Issues" Vol. 11, pp-2, 2014. 2. Kompan M., Bieliková M. (2010) Content-Based News Recommendation. In: Buccafurri F., Semeraro G. (eds) E-Commerce and Web Technologies. EC-Web 2010. Lecture Notes in Business Information Processing, vol 61. Springer, Berlin, Heidelberg. 3. Adomavicius, G, & Kwon, Y. O. (2012). Improving aggregate recommendation diversity using ranking-based techniques. IEEE Transactions on Knowledge and Data Engineering, 24(5), 896-911. 4. MinsukKahng, Sangkeun Lee, Sang-goo Lee, Ranking in Context-Aware Recommender Systems,pp-65-66, 2011. 5. Y. Ma, S. Ji, Y. Liang, J. Zhao and Y. Cui, "A Hybrid Recommendation List Aggregation Algorithm for Group Recommendation," 2015 IEEE/WIC/ACM International Conference on Web Intelligence and Intelligent Agent Technology (WI-IAT), Singapore, 2015, pp. 405-408.J. Wang, "Fundamentals of erbium-doped fiber amplifiers arrays (Periodical style—Submitted for publication)," *IEEE J. Quantum Electron.*, submitted for publication. 6. Ch.Nagini, M.Srinivasa Rao, Dr. R.V.Krishnaiah, International Journal of Engineering Research & Technology, Vol. 2,pp-701-704,2013.Y. Yorozu, M. Hirano, K. Oka, and Y. Tagawa, "Electron spectroscopy studies on magneto-optical media and plastic substrate interfaces(Translation Journals style)," *IEEE Transl. J. Magn.Jpn.*, vol. 2, Aug. 1987, pp. 740–741 [*Dig. 9th Annu. Conf. Magnetics* Japan, 1982, p. 301]. 7. Barskar, N. and Patidar, C.P., 2016. A survey on cross browser inconsistencies in web application. International Journal of Computer Applications, 137(4), pp.37-41. 8. Gediminas Adomavicius, Young, Kwon Improving Recommendation Diversity Using Ranking-Based Techniques, pp-1-33. 9. Bahram amini, roliana ibrahim, mohd shahizan othman, "Discovering the impact of knowledge in recommender systems: a comparative study", International Journal of Computer Science & Engineering Survey, vol 2,pp-3,2011. 10. Patidar CP, Sharma M. An Automated Approach for Cross-Browser Inconsistency (XBI) Detection. InProceedings of the 9th Annual ACM India Conference 2016 Oct 21 (pp. 141-145). ACM.	**5-9**

3.	**Authors:**	**Sri Herwiningsih, Chomsin S. Widodo, Fahrizal Rifqi**	
	Paper Title:	**The Effect of Formalin Addition on the Electrical Impedance of White Shrimp**	
	Abstract: Shrimp is one of the important protein sources for diet. Shrimp has high water content, causing quick spoilage of the product and degradation of its quality from post-harvesting to end-consumers. The use of formalin to prolong the shelf life of shrimp has become a raised issue in the food safety field as formalin could have negative impacts on human health. Therefore, its use in food products is prohibited. The electrical impedance spectroscopy could be used to detect the food additives such as formalin in shrimp. This paper discusses the impedance of the shrimp after soaked in formalin solution. The shrimp samples were soaked in the different concentrations of formalin solution and stored for five days. The shrimp without formalin was used as a control sample. The electrical properties of the shrimp samples were measured using the electrical impedance spectroscopy method using frequency from 1 Hz to 1 MHz each day. The results show that the impedance of the shrimp decrease with an increase of the storage time. The shrimp with formalin experience a slower degradation compared to the shrimp without formalin. Higher the formalin concentrations (10% - 40%) added to the shrimp causes a slower texture change on the shrimp compared to lower formation concentrations (1%-5%). The impedance of the shrimp decrease with the increase of injected signal frequency. The electrical impedance spectroscopy has the potential to be developed as a tool in food safety field to detect food additives contained in the food to ensure the safety of the food products to the consumers. **Keywords:** Electrical impedance spectroscopy, formalin, shrimp. **References:** 1. J. S. Dayal, A. G. Ponniah, H. I. Khan, et al. (2013). Shrimps - a nutritional perspective. *Curr Sci*. 104:1487–1491. 2. J. Ngginak, H. Semangun, J. C. Mangimbulude, F. S. Rondonuwu. (2013). Active compounds in shrimp and its application in food. *J Sains Med*. 5:128–145. (In Indonesian) 3. M. S. Rahman, *Handbook of Food Preservation.* Third Edition. Boca Raton: CRC Press, 2020. 4. F. Faradila, Y. Alioes, E. Syamsir. (2014). Identification of formalin in meat ball sold in Padang City. *J Kesehat Andalas*. 3:156–158. https://doi.org/10.25077/jka.v3i2.71. (In Indonesian) 5. R. Uddin, M. I. Wahid, T. Jesmeen, et al. (2011). Detection of formalin in fish samples collected from Dhaka city, Bangladesh. *Stamford J Pharm Sci*. 4:49–52. https://doi.org/10.3329/sjps.v4i1.8866 6. S. Bhowmik, M. Begum, M. A. Hossain, et al. (2017). Determination of formaldehyde in wet marketed fish by HPLC analysis: A negligible concern for fish and food safety in Bangladesh. *Egypt J Aquat Res*. 43:245–248. https://doi.org/10.1016/j.ejar.2017.08.001 7. C. K. Pandey. (2000). Toxicity of ingested formalin and its management. *Hum Exp Toxicol*. 19:360–366. https://doi.org/10.1191/096032700678815954 8. M. Grossi, B. Riccò. (2017). Electrical impedance spectroscopy (EIS) for biological analysis and food characterization: A review. *J Sensors Sens Syst*. 6:303–325. https://doi.org/10.5194/jsss-6-303-2017 9. A. Nakonieczna, B. Paszkowski, A. Wilczek, et al. (2016). Electrical impedance measurements for detecting artificial chemical additives in liquid food products. *Food Control*. 66:116–129. https://doi.org/10.1016/j.foodcont.2016.01.044 10. R. R. A. Putri, C. Sulistya, D. R. Santoso. (2017). Analysis of the electrical impedance of Trout fish meat stored in the freezer. *Indones J Appl Phys*. 6:117–124. https://doi.org/10.13057/ijap.v6i02.1780. (In Indonesian) 11. J. Juansah, I. W. Budiastra, K. Dahlan. (2012). The Prospect of Electrical Impedance Spectroscopy as Non-Destructive Evaluation of Citrus Fruit Acidity. *Int J Emerg Technol Adv Eng* .2:58–64. 12. A. Fuentes, R. Masot, I. Fernández-Segovia, et al. (2013). Differentiation between fresh and frozen-thawed sea bream (Sparus aurata) using impedance spectroscopy techniques. *Innov Food Sci Emerg Technol*. 19:210 - 217. https://doi.org/10.1016/j.ifset.2013.05.001 13. O. Hermawan, A. T. Mukti, M. Yasin. (2020). Formaldehydecontent in white shrimp after formalin soaking with different doses. *J Aquac Fish Heal*. 9:69–74. https://doi.org/10.20473/jafh.v9i1.15915 14. X. Zhao, H. Zhuang, S. C. Yoon, et al. (2017). Electrical impedance spectroscopy for quality assessment of meat and fish: A review on basic principles measurement methods, and recent advances. *J. Food Qual*.1-16.	**10-14**