

# Novel Research and Development Approaches in Heterogeneous Systems and Algorithms

Santanu Koley (/affiliate/santanu-koley/426263/), Subhabrata Barman (/affiliate/subhabrata-barman/315930/), Subhankar Joardar Copyright: © 2023 | Pages: 323 ISBN13: 9781668475249 | ISBN10: 1668475243 | EISBN13: 9781668475263 DOI: 10.4018/978-1-6684-7524-9

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Almost every element of life, from commerce and agriculture to communication and entertainment, has been profoundly altered by computing. Around the world, people rely on computers for the creation of systems for energy, transportation, and military use. Additionally, computing fosters scientific advancements that advance our basic understanding of the world and assist in finding answers to pressing health and environmental issues.

**Novel Research and Development Approaches in Heterogeneous Systems and Algorithms** addresses novel research and developmental approaches in heterogenous systems and algorithms for information-centric networks of the future. Covering topics such as image identification and segmentation, materials data extraction, and wireless sensor networks, this premier reference source is a valuable resource for engineers, consultants, practitioners, computer scientists, students and educators of higher education, librarians, researchers, and academicians.

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	is not known. Blockchain-based technologies use distributed ledgers that can

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(/gateway/chapter/full- text-html/320129)	Digital microfluidic biochips (DMFB), a newly developed lab-on-chip device, has evolved in recent years as a significant miniaturized platform fu
	applications in the area of point-of-care investigations, DNA sequencing, and further
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	significantly affects the country's economy. The agricultural sector continues
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lext-11(11)/320134)	Finding a house for rent in a new city within the budget is a major issue especially for new college students and employees. In this scenario,
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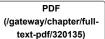
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> Wireless sensor network (WSN) consists of sparsely distributed, low energy, and bandwidth sensor nodes that collect sensed data. In WSNs, these data are initially converted from analog to digital signals and transmitted to base...

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# Chapter 14 House Rent Prediction Using Ensemble–Based Regression With Real–Time Data

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**Syed Saif Ahmed** Haldia Institute of Technology, India

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#### ABSTRACT

Finding a house for rent in a new city within the budget is a major issue especially for new college students and employees. In this scenario, an effective house rent prediction algorithm will be extremely beneficial. The rent for a house is affected by certain aspects such as number of rooms, distance from the market, region, availability of transport, and many more. With the help of different machine learning algorithms, the authors try to analyze, predict, and visualize the rent of a house. In this chapter, the authors have implemented multiple linear regression models and other ensemble learning methods like Adaboost regressor, random forest regressor, gradient boost regressor, and XGboost regressor to tune the overall model performance. The authors self-surveyed data set contains records of a city in West Bengal, India. So far, almost no work has been done in this context for Haldia. The authors' proposed house rent prediction model predicts rent with an accuracy of 98.20%.

DOI: 10.4018/978-1-6684-7524-9.ch014