

【CLAIMS】**【Claim 1】**

A system for estimating a market price of real estate by using big data, comprising:

5 a real transaction price acquisition unit which acquires real transaction prices and building-related information of real transaction real estates located within a predetermined region from a real estate to be evaluated;

 a learning model generation unit which generates a transaction price estimation learning model using the acquired real transaction prices and building-
10 related information of the real transaction real estates; and

 a market price estimation unit which estimates the market price of the real estate to be evaluated by applying building-related information of the real estate to be evaluated to the transaction price estimation learning model,

 wherein the learning model generation unit comprises:

15 an real transaction real estate pair generation unit which generates an real transaction real estate pair for real transaction real estates within a predetermined distance among the real transaction real estates;

 a transaction price ratio calculation unit which calculates a transaction price ratio for each real transaction real estate pair; and

20 a modeling unit which generates the transaction price estimation learning model based on the transaction price ratio and building-related information of the real transaction real estate pair,

 wherein the real transaction real estates within a predetermined distance are applied as an independent transaction in a first real transaction real estate pair and

as a dependent transaction in a second real transaction real estate pair.

【Claim 2】

5 The system for estimating a market price of real estate by using big data according to claim 1, wherein the real transaction price acquisition unit filters out some of the real transaction real estates based on density or real transaction timings of the real transaction real estates.

【Claim 3】

10 The system for estimating a market price of real estate by using big data according to claim 1, wherein the transaction price ratio is related to a value obtained by dividing a first real transaction price of a first real transaction real estate by a second real transaction price of a second real transaction real estate.

15 **【Claim 4】**

 The system for estimating a market price of real estate by using big data according to claim 1, wherein the modeling unit generates the transaction price estimation learning model using at least one of multiple regression analysis, artificial neural network, M5P (decision tree), Bayesian Network and CART.

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【Claim 5】

 The system for estimating a market price of real estate by using big data according to claim 1, wherein the market price estimation unit further applies building-related information of a predetermined number of real transaction real estates located

within a predetermined distance from the real estate to be evaluated to the transaction price estimation learning model.

【Claim 6】

5 The system for estimating a market price of real estate by using big data according to claim 1 or 5, wherein the market price estimation unit corrects the real transaction price using real transaction prices and real transaction timing of the real transaction real estates and a current cash value, and applies the corrected real transaction price to the transaction price estimation learning model.

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【Claim 7】

 The system for estimating a market price of real estate by using big data according to claim 1 or 5, wherein the market price estimation unit estimates the market price of the real estate to be evaluated further using distances or angles
15 between the real estate to be evaluated and the real transaction real estates.

【Claim 8】

 The system for estimating a market price of real estate by using big data according to claim 5, wherein the market price estimation unit calculates candidate
20 group market prices of the real estate to be evaluated for each of the predetermined number of real transaction real estates, and estimates an average of the calculated candidate group market prices as the market price of the real estate to be evaluated.

【Claim 9】

The system for estimating a market price of real estate by using big data according to claim 1, further comprising:

a database which stores the building-related information of the real estate to be evaluated and the building-related information of the real transaction real estates.

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【Claim 10】

A method for estimating a market price of real estate by using big data, comprising:

acquiring real transaction prices and building-related information of real transaction real estates located within a predetermined region from real estate to be evaluated;

generating a transaction price estimation learning model using the acquired real transaction prices and building-related information of the real transaction real estates; and

estimating the market price of the real estate to be evaluated by applying building-related information of the real estate to be evaluated to the transaction price estimation learning model,

wherein the step of generating the transaction price estimation learning model comprises:

generating a real transaction real estate pair for real transaction real estates within a predetermined distance among the real transaction real estates;

calculating a transaction price ratio for each real transaction real estate pair; and

modeling to generate the transaction price estimation learning model based

on the transaction price ratio and building-related information of the real transaction real estate pair,

wherein the real transaction real estates within a predetermined distance are applied as an independent transaction in a first real transaction real estate pair and
5 as a dependent transaction in a second real transaction real estate pair.

【Claim 11】

The method for estimating a market price of real estate by using big data according to claim 10, wherein the step of acquiring the real transaction price
10 comprises filtering out some of the real transaction real estates based on density or real transaction timings of the real transaction real estates.

【Claim 12】

The method for estimating a market price of real estate by using big data
15 according to claim 10, wherein the transaction price ratio is related to a value obtained by dividing a first real transaction price of a first real transaction real estate by a second real transaction price of a second real transaction real estate.

【Claim 13】

20 The method for estimating a market price of real estate by using big data according to claim 10, wherein the modeling step comprises generating the transaction price estimation learning model using at least one of multiple regression analysis, artificial neural network, M5P (decision tree), Bayesian Network and CART.

【Claim 14】

The method for estimating a market price of real estate by using big data according to claim 10, wherein the step of estimating the market price of the real estate to be evaluated comprises further applying building-related information of a
5 predetermined number of real transaction real estates located within a predetermined distance from the real estate to be evaluated to the transaction price estimation learning model.

【Claim 15】

10 The method for estimating a market price of real estate by using big data according to claim 10 or 14, wherein the step of estimating the market price of the real estate to be evaluated comprises correcting the real transaction price using real transaction prices and real transaction timings of the real transaction real estates and a current cash value, and applying the corrected real transaction price to the
15 transaction price estimation learning model.

【Claim 16】

The method for estimating a market price of real estate by using big data according to claim 10 or 14, wherein the step of estimating the market price of the
20 real estate to be evaluated comprises estimating the market price of the real estate to be evaluated further using at least one of distances and angles between the real estate to be evaluated and the real transaction real estates.

【Claim 17】

The method for estimating a market price of real estate by using big data according to claim 16, wherein the step of estimating the market price of the real estate to be evaluated comprises calculating candidate group market prices of the real estate to be evaluated for each of the predetermined number of real transaction
5 real estates, and estimating an average of the calculated candidate group market prices as the market price of the real estate to be evaluated.

【Claim 18】

A computer-readable recording medium having instructions stored thereon for
10 performing the method according to claim 10.