

determine the crime forecast by further adjusting the historical crime rate based on a correlation between a future event and the crime data.

[0005A] According to a first aspect, there is provided a computer implemented-method for determining and outputting a crime forecast, the method including: storing crime data in a database, the crime data including information indicative of the locations and times of crimes; storing weather data in the database, the weather data including past and forecasted weather conditions; determining a crime forecast location; determining a crime forecast time period; determining, based on the weather data, a forecasted weather condition for the crime forecast location during the crime forecast time period; determining, based on the crime data and the past weather conditions included in the weather data, a correlation between the crimes included in the crime data and the forecasted weather condition; determining, based on the crime data, an historical crime rate in the crime forecast location for time periods similar to the crime forecast time period; determining the crime forecast by adjusting the historical crime rate based on the correlation between the crimes included in the crime data and the forecasted weather condition; and outputting the crime forecast to a remote computer system.

[0005B] According to a second aspect, there is provided a crime forecast system, including: a database that stores crime data and weather data, the crime data including information indicative of the locations and times of crimes and the weather data including past and forecasted weather conditions; and an analysis unit that: determines a crime forecast location; determines a crime forecast time period; determines, based on the weather data, a forecasted weather condition for the crime forecast location during the crime forecast time period; determines, based on the crime data and the past weather conditions included in the weather data, a correlation between the crimes included in the crime data and the forecasted weather condition; determines, based on the crime data, an historical crime rate in the crime forecast location for time periods similar to the crime forecast time period; determines the crime forecast by adjusting the historical crime rate based on the correlation between the crimes included in the crime data and the forecasted weather condition; and outputs the crime forecast to a remote computer system.

BRIEF DESCRIPTION OF THE DRAWINGS

[0006] Aspects of exemplary embodiments may be better understood with reference to the accompanying drawings. The components in the drawings are not necessarily to scale, emphasis instead being placed upon illustrating the principles of exemplary embodiments.

[0007] FIG. 1 is a drawing illustrating a points of interest view of a graphical user interface output by a crime forecasting system according to an exemplary embodiment of the present invention;

[0008] FIG. 2 is an overview of the crime forecasting system according to an exemplary embodiment of the present invention;

[0009] FIG. 3 is a block diagram of the crime forecasting system illustrated in FIG. 2 according to an exemplary embodiment of the present invention;

[0010] FIG. 4 is a drawing illustrating a street level view of the graphical user interface output by the crime forecasting system according to an exemplary embodiment of the present invention;

[0011] FIGS. 5A and 5B are drawings illustrating neighborhood views of the graphical user interface output by the crime forecasting system according to an exemplary embodiment of the present invention;

[0012] FIG. 6 is a drawing illustrating a travel route view of the graphical user interface output by the crime forecasting system according to an exemplary embodiment of the present invention;

[0013] FIG. 7 is a drawing illustrating a crime alert module and query alert module output by the crime forecasting system via the graphical user interface according to an exemplary embodiment of the present invention;

[0014] FIG. 8 is a drawing illustrating an hourly crime index module and a daily crime index module output by the crime forecasting system via the graphical user interface according to an exemplary embodiment of the present invention;