Summary

[005] Various embodiments discussed herein provide systems and methods for identifying and suggesting emoticons for segments of texts. Some systems and methods may be utilized during a user activity on a computing device including, without limitation, instant messaging, participating in online chat rooms, drafting e-mails, posting web blogs, or posting to web forums.

[006] According to a first aspect of the present invention, there is provided a method comprising:

selecting one or more segments from a text field, wherein each of the segments is in proximity to a current position of an input cursor in the text field;

performing a semantic analysis to determine a context of the one or more segments, the context comprising at least one of a mood and an emotion;

for one or more of the segments, identifying a respective candidate emoticon for the segment based on an association between the candidate emoticon and the context of the segment, the association exceeding a predetermined threshold value and being based on, at least, statistical usage of the candidate emoticon for the context by one or more users, wherein a strength of the association varies according to the statistical usage, and wherein an emoticon is identified as a candidate emoticon when the strength of the association exceeds the predetermined threshold value ;

providing one or more of the candidate emoticons for user selection, the candidate emoticons for user selection being based on at least one of a user preference, user-related information, and recipient-related information;

receiving user selection of one or more of the provided emoticons and inserting the selected emoticons into the text field at the current position of the input cursor; and updating the statistical usage of at least one of the provided emoticons based on the user selection.

[007]

[008]

[009] According to a second aspect of the present invention, there is provide a system comprising:

one or more computers programed to perform operations comprising:

selecting one or more segments from a text field, wherein each of the segments is in proximity to a current position of an input cursor in the text field;

performing a semantic analysis to determine a context of the one or more segments, the context comprising at least one of a mood and an emotion;

for one or more of the segments, identifying a respective candidate emoticon for the segment based on an association between the candidate emoticon and the context of the segment, the association exceeding a predetermined threshold value and being based on, at least, statistical usage of the candidate emoticon for the context by one or more users, wherein a strength of the association varies according to the statistical usage, and wherein an emoticon is identified as a candidate emoticon when the strength of the association exceeds the predetermined threshold value;

providing one or more of the candidate emoticons for user selection, the candidate emoticons for user selection being based on at least one of a user preference, user-related information, and recipient-related information;

receiving user selection of one or more of the provided emoticons and inserting the selected emoticons into the text field at the current position of the input cursor; and

updating the statistical usage of at least one of the provided emoticons based on the user selection.

[0010]

[0011]

[0012]

[0013] According to a third aspect of the present invention, there is provided a non-transitory computer-readable medium having instruction stored there on that, when executed by one or more computers, causes the computers to perform operations comprising:

selecting one or more segments from a text field, wherein each of the segments is in proximity to a current position of an input cursor in the text field;

performing a semantic analysis to determine a context of the one or more segments, the context comprising at least one of a mood and an emotion;

for one or more of the segments, identifying a respective candidate emoticon for the segment based on an association between the candidate emoticon and the context of the segment, the association exceeding a predetermined threshold value and being based on, at least, statistical usage of the candidate emoticon for the context by one or more users, wherein a strength of the association varies according to the statistical usage, and wherein an emoticon is identified as a candidate emoticon when the strength of the association exceeds the predetermined threshold value;

providing one or more of the candidate emoticons for user selection, the candidate emoticons for user selection being based on at least one of a user preference, user-related information, and recipient-related information;

receiving user selection of one or more of the provided emoticons and inserting the selected emoticons into the text field at the current position of the input cursor; and

updating the statistical usage of at least one of the provided emoticons based on the user selection.

[0014] Other features and aspects of some embodiments will become apparent from the following detailed description, taken in conjunction with the accompanying drawings, which illustrate, by way of example, the features in accordance with various embodiments.

[0015]

[0016]

CLAIMS

1. A method comprising:

selecting one or more segments from a text field, wherein each of the segments is in proximity to a current position of an input cursor in the text field;

performing a semantic analysis to determine a context of the one or more segments, the context comprising at least one of a mood and an emotion;

for one or more of the segments, identifying a respective candidate emoticon for the segment based on an association between the candidate emoticon and the context of the segment, the association exceeding a predetermined threshold value and being based on, at least, statistical usage of the candidate emoticon for the context by one or more users, wherein a strength of the association varies according to the statistical usage, and wherein an emoticon is identified as a candidate emoticon when the strength of the association exceeds the predetermined threshold value;

providing one or more of the candidate emoticons for user selection, the candidate emoticons for user selection being based on at least one of a user preference, user-related information, and recipient-related information;

receiving user selection of one or more of the provided emoticons and inserting the selected emoticons into the text field at the current position of the input cursor; and

updating the statistical usage of at least one of the provided emoticons based on the user selection.

2. The method of claim 1 wherein the at least one of the mood and the emotion comprises at least one of happiness, sadness, indifference, anger, resentment, contrition, and excitement.

3. The method of claim 1 wherein providing one or more of the candidate emoticons for user selection comprises displaying the candidate emoticons at or near the current position of the input cursor.

4. The method of claim 1 wherein providing one or more of the candidate emoticons for user selection comprises displaying the set of candidate emoticons on a physical input device or a virtual input device, wherein the physical input device and the virtual input device are configured to receive the entry selection.

5. The method of claim 4 wherein the virtual input device is displayed in close proximity to the text field.

6. The method of claim 1 wherein a particular segment comprises at least one of a word, a sentence fragment, a sentence, a phrase, and a passage that precedes or follows the current position of the input cursor.

7. The method of claim 1 wherein the user-related information includes a user interest, a user ethnicity, a user religion, a user geographic location, a user age, a user relational status, and a user occupation.

8. The method of claim 1 wherein the recipient-related information includes a recipient's relation to a user, a recipient interest, a recipient ethnicity, a recipient religion, a recipient geographic location, a recipient age, a recipient relational status, and a recipient occupation.

9. A system comprising:

one or more computers programed to perform operations comprising:

selecting one or more segments from a text field, wherein each of the segments is in proximity to a current position of an input cursor in the text field;

performing a semantic analysis to determine a context of the one or more segments, the context comprising at least one of a mood and an emotion;

for one or more of the segments, identifying a respective candidate emoticon for the segment based on an association between the candidate emoticon and the context of the segment, the association exceeding a predetermined threshold value and being based on, at least, statistical usage of the candidate emoticon for the context by one or more users, wherein a strength of the association varies according to the statistical usage, and wherein an emoticon is identified as a candidate emoticon when the strength of the association exceeds the predetermined threshold value;

providing one or more of the candidate emoticons for user selection, the candidate emoticons for user selection being based on at least one of a user preference, user-related information, and recipient-related information;

receiving user selection of one or more of the provided emoticons and inserting the selected emoticons into the text field at the current position of the input cursor; and

updating the statistical usage of at least one of the provided emoticons based on the user selection.

10. The system of claim 9 wherein the at least one of the mood and the emotion comprises at least one of happiness, sadness, indifference, anger, resentment, contrition, and excitement.

11. The system of claim 9 wherein providing one or more of the candidate emoticons for user selection comprises displaying the candidate emoticons at or near the current position of the input cursor.

12. The system of claim 9 wherein providing one or more of the candidate emoticons for user selection comprises displaying the set of candidate emoticons on a physical input device or a virtual input device, wherein the physical input device and the virtual input device are configured to receive the entry selection.

13. The system of claim 12 wherein the virtual input device is displayed in close proximity to the text field.

14. The system of claim 9 wherein a particular segment comprises at least one of a word, a sentence fragment, a sentence, a phrase, and a passage that precedes or follows the current position of the input cursor.

15. The system of claim 9 wherein the user-related information includes a user interest, a user ethnicity, a user religion, a user geographic location, a user age, a user relational status, and a user occupation.

16. The system of claim 9 wherein the recipient-related information includes a recipient's relation to a user, a recipient interest, a recipient ethnicity, a recipient religion, a recipient geographic location, a recipient age, a recipient relational status, and a recipient occupation.

17. A non-transitory computer-readable medium having instruction stored there on that, when executed by one or more computers, causes the computers to perform operations comprising:

selecting one or more segments from a text field, wherein each of the segments is in proximity to a current position of an input cursor in the text field;

performing a semantic analysis to determine a context of the one or more segments, the context comprising at least one of a mood and an emotion;

for one or more of the segments, identifying a respective candidate emoticon for the segment based on an association between the candidate emoticon and the context of the segment, the association exceeding a predetermined threshold value and being based on, at least, statistical usage of the candidate emoticon for the context by one or more users, wherein a strength of

the association varies according to the statistical usage, and wherein an emoticon is identified as a candidate emoticon when the strength of the association exceeds the predetermined threshold value;

providing one or more of the candidate emoticons for user selection, the candidate emoticons for user selection being based on at least one of a user preference, user-related information, and recipient-related information;

receiving user selection of one or more of the provided emoticons and inserting the selected emoticons into the text field at the current position of the input cursor; and

updating the statistical usage of at least one of the provided emoticons based on the user selection.

18. The computer-readable medium of claim 17 wherein the at least one of the mood and the emotion comprises at least one of happiness, sadness, indifference, anger, resentment, contrition, and excitement.

19. The computer-readable medium of claim 17 wherein providing one or more of the candidate emoticons for user selection comprises displaying the candidate emoticons at or near the current position of the input cursor.

20. The computer-readable medium of claim 17 wherein providing one or more of the candidate emoticons for user selection comprises displaying the set of candidate emoticons on a physical input device or a virtual input device, wherein the physical input device and the virtual input device are configured to receive the entry selection.

21. The computer-readable medium of claim 20 wherein the virtual input device is displayed in close proximity to the text field.

22. The computer-readable medium of claim 17 wherein a particular segment comprises at least one of a word, a sentence fragment, a sentence, a phrase, and a passage that precedes or follows the current position of the input cursor.

23. The computer-readable medium of claim 17 wherein the user-related information includes a user interest, a user ethnicity, a user religion, a user geographic location, a user age, a user relational status, and a user occupation.

24. The computer-readable medium of claim 17 wherein the recipient-related information includes a recipient's relation to a user, a recipient interest, a recipient ethnicity, a recipient religion, a recipient geographic location, a recipient age, a recipient relational status, and a recipient occupation.