specific distillation. Examples described herein can improve the operation of communication systems and devices in communication systems with AI language models with a smaller footprint (e.g., smaller memory use) than general models, and with comparable or improved performance within a given domain.

[0006a] According to a first aspect of the present disclosure, there is provided a computer-implemented method including: accessing natural language processing (NLP) general encoder data, wherein the NLP general encoder data is generated from a general-domain dataset that is not domain specific; accessing a domain specific dataset; generating filtered encoder data using a subset of the NLP general encoder data; training the filtered encoder data using the domain specific dataset to generate distilled encoder data; and generating tuning values for the distilled encoder data to configure task outputs associated with the domain specific dataset.

[0007] ~~Certain embodiments of the present disclosure include a system. The system may include one or more data processors; and a non-transitory computer-readable storage medium containing instructions which, when executed on the one or more data processors, cause the one or more data processors to perform the methods described above and herein.~~

According to a second aspect of the present disclosure, there is provided a device, including: a memory; and one or more processors coupled to the memory and configured to perform operations including: accessing encoder data, wherein the encoder data is generated from a general-domain dataset that is not domain specific; accessing a domain specific dataset; generating filtered encoder data using a subset of the encoder data; training the filtered encoder data using the domain specific dataset to generate distilled encoder data; and generating tuning values for the distilled encoder data to configure task outputs associated with the domain specific dataset.

[0008] ~~Certain embodiments of the present disclosure include a computer program product tangibly embodied in a non-transitory machine-readable storage medium, including instructions configured to cause a data processing apparatus to perform the methods described above and herein.~~

According to a third aspect of the present disclosure, there is provided a non-transitory computer readable storage medium including instructions that, when executed by one or more processors of a device, cause the device to perform operations including: accessing encoder data, wherein the encoder data is generated from a general-domain dataset that is not domain specific; accessing a domain specific dataset; generating filtered encoder data using a subset of the encoder data; training the filtered encoder data using the domain specific dataset to generate distilled encoder data; and generating tuning values for the distilled encoder data to configure task outputs associated with the domain specific dataset.

BRIEF DESCRIPTION OF THE DRAWINGS

[0009] The present disclosure is described in conjunction with the appended Figures:

[0010] FIG. 1A shows an example embodiment of a network interaction system for use with a domain specific NLP encoder in accordance with some aspects of the present technology;

[0011] FIG. 1B illustrates aspects of a NLP implementation using distilled encoder processing in accordance with some aspects of the present technology;

[0012] FIG. 1C illustrates aspects of encoder processing data that can be used to generate distilled encoder processing data in accordance with some aspects;

[0013] FIG. 2 shows an example embodiment of a network interaction system for use with a domain specific NLP encoder in accordance with some aspects of the present technology;

[0014] FIGS. 3A, 3B, and 3C show example embodiments of a network interaction system that includes a connection management system for use with a domain specific NLP encoder in accordance with some aspects of the present technology;