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|-------|------------------|---|------------------|---|------------|----|
|       | authors          | <ul style="list-style-type: none"><li>Katarína Benešová</li><li>Andrej Ávec</li><li>Marek Áuppa</li></ul>   | authors          | <ul style="list-style-type: none"><li>Katarína Benešová</li><li>Andrej Ávec</li><li>Marek Áuppa</li></ul>   | DUPLICATES | 30 |
|       | title            | Cost-effective Deployment of BERT Models in Serverless Environment  | title            | Cost-effective Deployment of BERT Models in Serverless Environment  |            |    |
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|       | urls             | <ul style="list-style-type: none"><li>http://arxiv.org/pdf/2103.10673v2</li><li>http://arxiv.org/abs/2103.10673v2</li><li>http://arxiv.org/pdf/2103.10673v2</li></ul>   | urls             | <ul style="list-style-type: none"><li>https://web.archive.org/web/20210421032539/https://arxiv.org/pdf/2103.10673v2.pdf</li></ul>   |            |    |
|       | id               | id4327090977737325995   | id               | id-5406197705243831488  |            |    |
|       | abstract         | In this study we demonstrate the viability of deploying BERT-style models to serverless environments in a production setting. Since the freely available pre-trained models are too large to be deployed in this way, we utilize knowledge distillation and fine-tune the models on proprietary datasets for two real-world tasks: sentiment analysis and semantic textual similarity. As a result, we obtain models that are tuned for a specific domain and deployable in serverless environments. The subsequent performance analysis shows that this solution results in latency levels acceptable for production use and that it is also a cost-effective approach for small-to-medium size deployments of BERT models, all without any infrastructure overhead. | abstract         | In this study we demonstrate the viability of deploying BERT-style models to serverless environments in a production setting. Since the freely available pre-trained models are too large to be deployed in this way, we utilize knowledge distillation and fine-tune the models on proprietary datasets for two real-world tasks: sentiment analysis and semantic textual similarity. As a result, we obtain models that are tuned for a specific domain and deployable in serverless environments. The subsequent performance analysis shows that this solution results in latency levels acceptable for production use and that it is also a cost-effective approach for small-to-medium size deployments of BERT models, all without any infrastructure overhead. |            |    |
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