# A privacy-preserving protocol for finding the nearest doctor in an emergency 

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| Title: | A privacy-preserving protocol for finding the nearest doctor in an <br> emergency |
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| Abstract: | In this work, we define the Nearest Doctor Problem (NDP) <br> for finding the closest doctor in case of an emergency and <br> present a secure multi-party computation for solving it. <br> The solution is based on a privacy-preserving <br> cryptographic protocol and makes use of the current <br> location of each participating doctor. The protocol is <br> efficient and protects the privacy of the location of all <br> doctors. A prototype implementing the proposed solution <br> for a community of doctors that use mobile devices to <br> obtain their current location is presented. |

