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