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Privacy-Preserving Statistical Analysis on Ubiquitous Health Data

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Title:	**Privacy-Preserving Statistical Analysis on Ubiquitous Health Data**
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Abstract:	In this work, we consider ubiquitous health data generated from wearable sensors in a Ubiquitous Health Monitoring System (UHMS) and examine how these data can be used within privacypreserving distributed statistical analysis. To this end, we propose a secure multi-party computation based on a privacy-preserving cryptographic protocol that accepts as input current or archived values of users' wearable sensors. We describe a prototype implementation of the proposed solution with a community of independent personal agents and present preliminary results that confirm the viability of the approach.