



## Encrypted Messenger Development

A recent change in its terms of service has pushed millions of WhatsApp users to adopt alternative services such as Signal and Telegram. As reported by The Guardian<sup>1</sup>: “Over the first three weeks of January, Signal has gained 7.5 million users globally, according to figures shared by the UK parliament’s home affairs committee, and Telegram has gained 25 million”. Even the Tesla CEO Elon Musk has jumped into the fray, tweeting “Use Signal” to his more than 42 million followers. This and many other incidents show us that in the age of mass surveillance and information breach, private messaging is becoming more important every day.



However, none of the available messaging apps are perfect. Signal, WhatsApp, and Threema offer end-to-end encryption and forward secrecy but they do not support cloud features, such as logging in from multiple devices and immediately having access to all of the previous messages. While such features are offered by the unencrypted messengers such as Telegram or Facebook Messenger. Naturally, a question arises if it is possible to create a messaging app that offers all of the convenience of an unencrypted messenger, but is as secure as possible. In this project, we want to further develop a messenger application we have created which uses Telegram’s infrastructure, but provides both, end-to-end encryption and cloud services.

**Requirements:** Prior experience in programming, a strong interest in cryptography, web, and mobile application development. We will have weekly meetings to address questions, discuss progress and think about future ideas.

**Interested? Please contact us for more details!**

### Contact

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<sup>1</sup><https://www.theguardian.com/technology/2021/jan/24/whatsapp-loses-millions-of-users-after-terms-update>