Prof. R. Wattenhofer

Convenient Password Manager

Nowadays, it is not uncommon to have dozens of user accounts. Most people struggle with the task of memorizing a large number of different passwords for all their social media accounts, cloud backup systems, work email, and devices. Safe passwords are usually the ones that are hard to guess but sadly also hard to remember.

It is because of this that people choose to trade off security for convenience by choosing simple passwords and possibly reuse them for multiple services. Although there is software that can help people store their passwords securely, these systems are still too cumbersome to use and are rarely used in practice. Since we store more and more data in the cloud, the consequences of using weak passwords are becoming more severe.

We want to get rid of the security-convenience tradeoff when it comes to passwords. The goal of this thesis is to extend a password manager from a previous project to make it even more convenient. We have some ideas on how to approach this task, but we would love to hear your take on this as well! If this sounds interesting to you, do not hesitate to contact us so we can have a chat.

Requirements: Experience or interest in functional programming is important. Android programming experience is an advantage. There will be weekly meetings with your supervisors to discuss progress and open questions.

Interested? Please contact us for more details!

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