Carry your Genes (CyG)
Bachelor Thesis

Personalized medicine will be the answer to ever growing need of individual medical treatment. One of the important topic to a successful establishment of this medical field is the secure and easy access to personalized genome / medical data. The patient needs to be able to present this information/data to a doctor in a secure way, protecting his privacy. Only himself and an authorized agent should be able to control the access to his most personal records, his genes.

A not so distant future scenario could be the following: A patient can transfer his genetic data/reports via a secure local client software from his personal computer to his mobile smartphone. This smartphone is equipped with a special hardware encrypted storage device. A mobile app allows the administration of this data. He can store, read, view and temporarily transfer this data to a trusted person, such as his treating doctor. The medical personal on the other hand can receive the data with his mobile device and app, and screen the information to aid choosing an appropriate treatment. The data he sees is only available to him for a limited time and/or can be deactivated by the patient.

The aim of this study is to develop a secure client for the data transfer between a PC and smartphone, the usage of secure storage in this smartphone and the creation of a smartphone/tablet app (android) to allow the above outlined scenario.

What? Hiwi job (one month) in combination with Bachelor Thesis project.

Where? iteratec GmbH, Inselkammerstrasse 4, 82008 München-Unterhaching

When? asap

Who? Informatics / Bioinformatics students @TUM

How? To apply please contact:
Dr. Lothar Richter
richter@in.tum.de
Daniel Stahr / Dr. Marc Offman
bewerbung@iteratec.de