1, Hello, my name is Diana.
I'm studying Media Informatics at the University of
Munch
Today, I present you my work which is called Intimate
Data in Relationships: Tracking, Sharing,
Surveillance – Personal Boundaries?

2, First or all, I want to explain the term Quantified Self.
Did anybody heard about this before?
So, I want to explain Quantified Self with an example.
In this picture, you can see Ellis. Ellis is a huge fan of
the Quantified Self Movement.
In this project Ellis investigated her body and looked at
all her skin scars.

3, Because Ellis has experienced a lot over the years, for
instance a car accident.

4, And over the years, many scars have accumulated.
She measured all her scars in length and wide and
came up to about 1m length and 30 cm wide.
She collected also even more information, e.g. on
which day the scars are occurred, and found that
28% of the accidents are in May.
Ellis was asked by many people why she does that.

5, Ellis said that in this way she is able to reflect herself
by quantifying her body, and to get more insights and
control. With these knowledge, she can influence her
behavior in a positive way, for instance be more
carefully in May :-)

6, So, nearly everything can be tracked and quantified. Kevin Kelly, the author of the book "The Inevitable", wrote that "[...] anything that can be tracked is being tracked by someone somewhere" and that "Self-tracking is much broader than health. It is as big as our life itself".

7, But tracking almost anything that is possible also captures intimate data which are sure to emerge in our lives.
So what is about this? How can we track our relationship?
And which data did we perceive as intimate? And are there personal boundaries? I would like to address these questions in the next slides.

8, What data are perceived as intimate at all? This question was not as easy to answer as it seems at first glance, because it depends on several factors. In general it has to be differentiated between the culture and which factors are shaping the socio-cultural live. And what is perceived as intimate is subjective, at all.
I tried to cluster some terms that came from others work which includes topics related to intimate data. Here we can see this topics. It is related to Health care, Reproduction health, Fertility tracking, Sex tracking, but it arise also by using social media and online dating services.
I colored the terms that I will address.

9, To bring all these terms in order I want to go along the so called live course of intimate relationships defined by Levy.

In her work Levy defined four conditions which describes the different stats a relationship can be.

I will explain these conditions in the following and give some examples which intimate data can be collected, tracked and shared.

10, Condition A stands for the beginning of a potential relationship. The partner know each other or would like to know each other. The aim is to learn more about the other person.

In this slide I give some well-known examples for technologies or applications that are used for this, like Google or Facebook and Tinder.

Or the Lulu application, I think this is not so well known. The Luliu application gives young women the opportunity to review male students and friends, with with they are connected on Facebook.

11, With the use of these services, the data are made available and / or taken by ourselves or other users. Levy wrote, that many people use Google, Facebook, Tinder or the smartphone application Lulu the get information about another person of our interesst.

And as we can see for example Tinder collects a huge amount of data about their users, which includes also intimate data like sexual preferences.

12, The problem also is that users disclose information
quickly to strangers.
Most published data are personal data: full
name, date of birth, phone numbers, work
detail, the complete home address.
Nandwani et al. showed in a study that users
disclosured their data because they trust in
the authenticity of the other with an active
profile account.

13, Next, in Condition B the partners are already in a
relationship or something appropriate. The partners
known each other better and have an mutual
interest, possibly sexual interests.
There is a very large and growing market in this area,
offering new wearable devices with internet
connectivity and applications for evaluation.

14, There are some potential risks that came up by using
such technologies.
First, this are really intimate data which can be tracked.
It is not always guaranteed that the data are
anonymous.
The data can be resold, because companies have a
commercial interest on these kind of data, for
example insurance companies.
There is also the problem of quantification the activity,
similar to a sport activity like swimming. This
supports gender stereotypes and gamification.

15, In Conduction B with Sex tracking, the focus was more on man, with comparison with others and gamification.
In Condition C, the woman is being tracked and monitored, or rahter her menstrual cycle and her body.
The Glow application is well known in this area. This app collects a huge amount of data, which the user can entered. That's are typical data to predict ovulation and fertile days.
These data are further processed and evaluated by the provider in order to make better predictions. And this works really good, even if you do not enter data every day.

16, Condition C is about Surveillance, Abuse and Revenge.
Today, surveillance can take place in relationships, because there are several possibilities trough location-based tracking, for instance with the application FindMyFriend.
People track their location with the partner, family and friends. However, it is not enough explored what impact this has on a relationships and, above all, the mutual trust in relationship.

18, Freed et al. conducted in a study how technologies are used today to harm partners or ex-partners.
For example, they found out that victims are often not aware that they were monitored by their abuser, and they did not know how to turn this surveillance.
In general, one can say that system security is not adequate for this type of attack, since these people were really close, and, for example, security questions can be answered or passwords are guessed. In this way, the abuser get access to the smartphone or the Facebook account.

19, So, now we are finished with all condition in the life course of a relationship. In each condition I gave an example, but I will summarize the risks in this slide. First, there can be a problem by quantifung the relationship, because there is a risk that the user can be lost in numbers and lose the relation. The user should always be aware of why he or she uses technology in the relationship and what the benefits are.

Second by tracking the partner all the time with location-based tracking applications like FindMyFriends, it is questionable how that affects the trust in a relationship. What is, if, the location data are not always available? Or if one of the partner does not want to be tracked anymore?

And last, the privacy and data security is a big topic, which people often do not care about it. It is not only a problem of one person, but also an interpersonal issue in a relationship.

20, The use of technologies in relationships can be useful, but should always be considered. In a relationship, a lot of intimate data comes up. Everyone has to decide for themselves where their personal boundaries lie.

Love and relationships have changed with the advent of new technologies. Today a relationship is influenced by the Internet and the desire for self-optimization. Time will tell where this leads to and how our relationships will look in the future.