# Personal Development Plan master

Olivier van Duuren 09-11-18

## **Designer Vision**

The past years I have been trying to imagine a future where people can feel flattered by technological 'intelligent' products. Products which have the ability to engage (e.g. by means of facilitating) and motivate people autonomously as humans can do to other humans. This human to human interaction can be very inspirational for defining the meaning of 'intelligent' regarding the development of new products.

These days a lot of intelligent/smart products are aimed to get smarter and smarter. However will this actually be perceived as positive as we all expect it will? A negative outcome already is, and can become to greater extent, is that products tend to decide for humans, initially to help, despite therefore overwrite and maybe even out rule humans and/or users' decisions. That is why I want to (and I think there is a need to) redefine the meaning of 'intelligent' in smart technology perspective while considering the least harm to user decision making.

I believe intelligent products are products which can also measure *how* input from the user is generated instead of only *what* input is generated. A product can be even more intelligent and still harmless whenever the *why* is also incorporated in user analysis. With this I do recognize that it is of great importance that the product is distinguishing different humans, because these all have different ways of generating input. I aim for products which truly understand users resulting in highly valued human-computer collaboration and thus are able to blend into the context. This level of collaboration can be explored with most potential in social settings, since in that context it is not only about understanding one user but also the other nearby users, from a computer-mind perspective.

# **Professional Identity**

During the last years I learned a lot about how design qualities like intelligence of products reflect in their technology and like aesthetics can communicate product's intentions. Several projects contributed to this and more will be set up to cover everything what is aimed/described above in the *Vision* section.

I analysed human-computer collaboration (HCC) throughout my final bachelor project (communication with domestic drones) one year ago (feb - jun 2017). This helped me to differently assess all functionalities of products in terms of collaborating with humans/users. Furthermore I am skilled enough to set up hi-fi prototypes which have intelligence, although I have not realized how this intelligence of products could affect the valued collaboration. I did not reach the level of distinguishing interactions in multi-user contexts (e.g. shared systems). I am not yet expert in working with expressive tangible interfaces, which are in my perspective truly important in order to measure *how* users give input. I do have experience in data-driven design referring to programming, researching for interface design and new knowledge. However it is still lacking on the level of reflecting upon the obtained data as a system to user.

## Goals

## Expertise area's

*Knowledge about human-computer collaboration (User & Society)* For interaction designers I believe it is very important to consider the human-computer collaboration which can have great impact on the overall user experience. I need to thoroughly understand more about user experience theories. In order to get this understanding I want to design while focusing on human emotion and read approximately three books about this topic. Moreover I could perhaps also attend some associated presentations to reach this true state of understanding. I will also enroll for the elective 'User Experience Theory and Practice' in February to learn more about the user experience theories. I think this understanding is very relevant for me, because I am interested in developing intelligent products (e.g. concerning IoT) to blend in to multi-user contexts.

## IoT skills (Technology and Realization)

Since the use of IoT is growing I believe I have to commit myself more to the exploration of IoT, in the sense of how I can make use of it as an interaction designer. I have quite some experience in programming and I know how relevant IoT is for intelligent systems. I feel it is still needed to improve my programming skills in terms of using internet, which is still new to me. I want to learn how to work with a design which retrieves and uses online information from for instance a database. Therefore I aim to deliver a product which can do that by the end of my first year (July 2019). I enrolled myself for a project 'Social Interactions with Shared Systems' in which I think I can work more with this since I can focus on multi-user smart home products. I think it is relevant for me, since I want to be able to use these skills to (co-)develop intelligent products in which IoT can be key, for my Final Master Project.

## Knowledge in multi-user design (Technology and Realization)

In the home context which I like to design for it is quite common that products need to take multiple users into account simultaneously. With the skills in realizing technological products I want to get to know how designing for multi-user can be different from single user design. I can obtain this knowledge by prototyping and user testing a multi-user centred design in my design project (Social Interactions with Shared Systems) this year(January 2019). I think this is important to know since I would like to design for smart home during my Final Master Project.

## Knowledge through expressive tangible design (Technology and Realization)

I like to focus on how users give input to an intelligent product in order for the product to be reacting appropriately. Therefore I want to conduct research to gain knowledge through a design which can measure expression. I would like to write a research paper during my research project (ends July 2019) about expressiveness in a design. I already wrote two research papers and have the skills to program these kind of technological products by the end of my design project. It can become very important to know how users give input when designing for intelligent products in a smart home, a context in which people want to feel at comfort. Therefore it is relevant to gain more knowledge about expressiveness in tangible design.

## Data-driven design skills (Math, Data and Computing)

Data analytics is a very popular thing, not specifically in product design, although I see some potential there. I know how to make sense of sensors and do really want to understand how I can use data in my design to learn about user behaviour. I want to learn how to use extensive data to get knowledge about my design. This should lead to at least one design decision in my design project, because I think I need it for my research project starting in February 2019. I enrolled myself for the elective 'Design Intelligence in Interaction' in which data is leading. Moreover the course 'Constructive Design Research' can also be potentially useful to make reasonable design decisions. For me this is a relevant skill, because I am very interested in learning from users through a design.

## Other

## Intern abroad

For my final master project I aim to get an internship agreement with a company focusing on smart homes preferably sound-related. I am looking at the interaction design department of Bang&Olufson(B&O), but before I want to get my personal learning goals more clear. In the meantime I am already looking for the relations I have with this company. By the end of this year (December 2018) I want to apply at companies like B&O, so before I need to get everything clear I want to do there and what I have them to offer.

## Data-driven portfolio design

In order to reach a company like B&O, described in *Intern abroad*, I would like to build an interactive portfolio representing my personal interests like intelligence through data-driven design. I think it is achievable to work on this portfolio alongside clarifying my personal goals in a practical manner. This is a nice side project which is enjoyable for me to do and what can be very effective in reaching other goals. In order to be effective I aim to finish this portfolio before the end of the year (December 2018).

#### Network as SURE Innovator

Besides my studies I work as Innovation consultant for SURE Innovation at the TU/e since it is very important to me to extend my network and kick-off my professional career in 2020. I aim to keep on being active throughout my masters at SURE. For me this is relevant just in order to strengthen my professional attitude and increasing my network for later.

## Long term (when graduated)

When I received my master degree I want to continue learning, not at an university but within a design consultancy. I am interested in a broad spectrum of projects and would like to keep on exploring as interaction designer by being relating research knowledge to design development and back. Topics in which I am quite interested are for instance smart home, music, sport (health and skill) and education.