Similar to prior Open Lab Hours status reports, we want to inform about the happenings in April and May. Furthermore, we intend to reflect on hosting the Open Lab Hours activity for the very first time over the course of the spring term 2016.

**Summary April/May 2016**

Frequent guests to the Open Lab Hours activity were some of our bachelor students, who were working on their thesis projects during the spring term. Consequently, we continued to have interesting discussions about the 3D touch technology as well as different approaches to teach game mechanics within platform games. It was particularly enjoyable to observe the evolution of their work from the beginning until the end. Providing a weekly meet-up to have meaningful conversations around the thesis work, not just with their supervisors but also other attendees, influenced the overall purpose of the Open Lab Hours activity very positively. The theses named “Usability Analysis of 3D Touch Technology in the Context of Mobile Gaming” and “En jämförande studie om direkt och indirekt vägledning i plattformsspel” will be published in DIVA later this year.

Romain worked on a holographic pyramid and discussed with Nico about the possibility of combining it with the Microsoft Surface Table. One major issue with both technologies is the need for a relatively dark environment to function properly. With a more powerful source of light, the holographic pyramid has potential be a nice tool for the 3D representation of virtual objects, e.g. within the context of museums.

Furthermore, the discussion around the application of iBeacons continued. Janosch and Romain developed some tools over the last couple of months and are now able to track in real-time iBeacon-connected devices, such

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1http://www.apple.com/iphone-6s/3d-touch/

2http://lnu.diva-portal.org/
as smartphones, moving through the corridors of the Department of Media Technology. As many said: “Oh, you are building the Marauders Map from Harry Potter”. Well, not too far from it. More details on that are yet to come. Keep your eyes open for news during the autumn term.

The Open Lab Hours activity is a good opportunity to discuss topics students are exploring in their classes, such as the “Mobile Games and Entertainment” course of our master program. Together with some of our master students we discussed about the definition of serious games, which led us to the broader question of “What is a game?”. Of course each of us has an own opinion and we all agreed to disagree. We also discussed the potential of Nintendo’s first excursion into the creation of a broader social media platform with their “Miitomo” application.

Nico used the Open Lab Hours activity to further explore possibilities and technologies to visualize Open Data in Virtual and Augmented Reality environments and was occasionally joined by one of our master students, who is interested in Open Data handling and manipulation. First discussions and explorations towards multi-user interaction in Virtual Reality were made. To implement Augmented Reality applications on the other hand, starting with the autumn term 2016, we will have a closer look at ARToolKit3, a free open source AR SDK.

We also had the pleasure to welcome two researchers from BTH University in the middle of May. Together with Jenny, we presented a lot of technologies available in the department as well as projects we are currently working on. Each technology, tool and project led to discussions about what was done in either of the universities, which brought very interesting perspectives on how other departments handle their research and what technologies are used to solve certain problems. Generally, this open dialog and exchange of information and perspectives with researchers from another university was quite well received. Among other technologies, we presented the Ultimaker 2 3D printer, the Mio bracelet, PlayStation Move controllers, iBeacons, the Microsoft Surface Table, the Texas Instrument SensorTag and the Oculus Rift head-mounted display. With overall 9 attendees (plus 2 hosts) we had a full house within the Open Lab Hours that day.

Finally, we had the pleasure to welcome a student from the mechanical engineering program at Linnaeus University to talk about 3D printing. A team of three students developed an improved version of a folding machine for aluminum tubes. This conceptual design was made using Solidworks, which allows to create dependencies between different pieces and demonstrate how the finale product will perform. Using the 3D printer, they were able to show the different pieces they improved to the company, as well as an animation of the product.

### Conclusion: VT16 Stats

During the spring term 2016, we hosted 14 Open Lab Hours sessions, besides some exceptions, on a weekly basis. The attendance was particularly good in the first half of the term, while it decreased overall during the second half. Offering and hosting this activity for the first time, we advertised it particularly strong in the beginning to make people aware and come by, while we went a bit more quiet with the advertisement towards the end. Nevertheless, through revisiting students such as the bachelor students, it was never boring and always interesting, challenging us to think about the most different topics.

We started this activity out of own initiative with the aim to provide a weekly meet-up to discuss media technology related matters and to slowly establish a community of people sharing similar areas of interest, exploring and tinkering around with different hard- and software technologies. And this is essentially what we did. We did not know what to expect and if there would be any demand for an activity like this at all. Having an objective look at the attendee numbers (see page 3), we certainly could do better to attract even more people. We are also considering offering the Open Lab Hours on a bi-weekly basis instead of a weekly one, but we have not yet decided on that. Nevertheless, we have some ideas and thoughts for activities and re-occurring events starting this autumn term. We will announce more in the months to come as we go along and ideas become concrete scenarios.

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3http://artoolkit.org
Once more, we would like to thank each and everyone who not just stopped by, but also provided opinions, thoughts and support towards this activity. We see you again in the autumn term 2016!

All creatures welcome.

For more information, please head over to bit.ly/OpenLabHoursLNU.