Welcome to our new UCLIC newsletter for 2014!

A lot has happened since the last newsletter, as UCLIC has continued to expand and develop in the last two years with many research successes! This year at the CHI conference, UCLIC had a record number of twelve papers accepted, of which five were awarded Honourable Mentions:

1) Bailly, G., Oulasvirta, A., Brumby, D.P. and Howes, A. Model of visual search and selection time in linear menus.


4) Brumby, D.P., Cox, A.L., Chung, J. and Fernandes, B. How does knowing what you are looking for change visual search behaviour?

5) Rogers, Y., Paay, J., Brereton, M., Vaisutis, K. L., Marsden, G. and Vetere, F. Never Too Old: Engaging Retired People Inventing The Future With MaKey MaKey.

I hope you will enjoy reading about some of the many highlights in this newsletter, which features our latest projects and initiatives as well as staff profiles and updates on ongoing research.

www.ucl.ac.uk/uclic
I began my life at UCL when first studying the then called MSc in Ergonomics in the early 80s. It opened my eyes to the value of studying many different subjects rather than only delving deeply into one. Every day, we traipsed to a different London college to study the various contributions to Ergonomics; for example, studying lighting at the Bartlett, physiology at Chelsea College, biomechanics at the Royal Free and Cognitive Psychology at Birkbeck College. Being exposed to so many different areas and cultures (‘old school’ Birkbeck was quite different from ‘new medical school’ Royal Free) could be overwhelming at times. But it paved the way for new insights, instilling in me why and how multidisciplinarity is central to HCI and Ergonomics when trying to frame questions and generate new ideas in the context of understanding the relationship between people and technology. I was also able to study a few subjects in more depth, such as cognitive psychology and organizational psychology. This enabled me to explore more theory, learn how to model users and conduct experiments to investigate the usability of user interfaces.

What has stuck with me most from my time on the old Ergonomics Master’s degree are my fond memories of the many visits we went on as part of the course to industrial places, such as Wall’s factory (where they make sausages), a now extinct coalmine in the Midlands and a control centre in the London Underground. We learnt so much more about real people, work and machinery than you could ever put across in a lecture.

After obtaining my Master’s degree I became increasingly interested in technology, interfaces and interaction design. I knew I wanted to continue studying after completing the course.

I got a job as a research demonstrator and begun my PhD in earnest, investigating the cognitive, semiotic and aesthetic properties of graphical representations, with a particular focus on iconic interfaces. It was exciting to be at the start of a new zeitgeist. I was inspired to think about future interfaces – having battled for so long with command-based interfaces. The field of Human-Computer Interaction (HCI) came into its fore and I became part of that movement, exploring how to augment and extend a diversity of human experiences with new technologies. While I continued to have an interest in Ergonomics, for me, the action and excitement was now in HCI.

In September 2011, I took up the directorship of UCLIC, following in Professor Ann Blandford’s footsteps. She had done an excellent job during the previous 6 years overseeing the HCI and Ergonomics Master’s course, keeping it up-to-date, while expanding it to match the changes taking place in the field. UCLIC has grown and changed considerably since it was the old Ergonomics Unit. In the beginning there were about 15 students each year on the course. Now, there are between 30–50 students per year from all over the world. I am always amazed at the backgrounds, skills and previous experiences of our students. This includes music, media, philosophy, computer science, languages, psychology and history of art. It makes for an eclectic and vibey mix.

There is a world of difference when looking back between my time on the course and the current course. For one, the student experience is very different. The course is more integrated in what and how it teaches the different strands of HCI and Ergonomics. Technology is central to everything, from the way we teach, what we teach and how the students learn. Many of the modules are more practice-based.
Even those who love their job still require time away from work to spend with their families, on hobbies or just relaxing. However, technology has made it easier than ever before to access work-related tasks away from the office, and many workers report checking e-mails on smartphones, pulling out their laptop at weekends and not using their time in the office effectively due to other technology-based demands, such as e-mail. However, there is also the possibility that aspects of technology can be harnessed to actively improve work-life balance. This is the main focus of the EPSRC-supported Digital Epiphanies project which aims to further our understanding of the double-edged effects of new technologies on work-life balance.

The UCLIC strand of this project focuses on the use of technology to increase awareness of digital habits. This has taken the form of "in the wild" investigations into e-mail use and social networking in order to assess whether we are able to encourage reflection on work-life balance issues and induce ‘digital epiphanies’. These are moments of realisation in relation to digital habits, leading to a change of behaviours. For example, users tend to feel stressed about the extent of their social networking use but also have very inaccurate perceptions of how much they time they spend on them.

Our studies have used RescueTime to collect objective data on social networking use and have encouraged participants to engage with this information through asking them to provide daily estimations.

Our work has also investigated how altering e-mail strategies can increase user’s sense of control and reduce the amount of time spent dealing with e-mails. E-mail overload is a significant aspect of many jobs, and the stress experienced as a result has obvious implications for work-life balance. These investigations have, therefore, explored the benefits and disadvantages of various strategies, as well as the impact of other e-mail behaviours, for instance access to work e-mails on smartphones outside of working hours.

Digital games have been a further focus of our research. We have recently published a paper in the International Journal of Human-Computer Studies on the potential for digital game play to have a positive influence on post-work recovery, through providing an opportunity for relaxation and psychological detachment. Overall, the project aims to provide valuable information on a personal and occupational level regarding the ways in which technology may interfere with work-life balance, as well as how it can be utilised in beneficial ways.
Recently, we developed the ‘London Living Labs’. What do we mean by this? In a nutshell: a diversity of real world settings in London where we test and observe our technology interventions that we have designed and deployed with the communities who reside or use them. These include urban sites, such as schools, parks, streets and inner-city neighbourhoods. For example, we have deployed in Hyde Park an experimental platform to support, manage and evaluate the efficacy of data from a range of fixed, mobile and participatory sensors, including citizen-generated contributions. To achieve this, we have worked with the Royal Parks, who are interested in collecting continuous data streams over several seasons. These can provide them and us with new opportunities for data mining and creating data visualizations of ecology, air and water quality, noise and light pollution, and public engagement. In turn, they enable us together to explore a range of grounded ways to change community behaviour. Participatory design in the wild!

A benefit of the urban Living Labs approach is the ability to scale up, reuse and generalize experiences, designs and platforms across the different parts of London and other cities.

The research agenda focuses on four central themes:

**City as a Platform**
Working with the scaled adaptive systems necessary for the urban environments of the future

**Harnessing the Invisible City**
Visualising and optimizing the invisible and forgotten resources and data flows of the city for informed decision-making

**Enabling Connected Communities**
Exploring how technology can enhance communities in relation to their sense of identity, well-being, health and place

**Sustaining Sustainable Practices**
Improving urban resource management through technology interventions and the science of behavioral change

Yvonne Rogers and Licia Capra are managing the UCL team. We also have seven PhD students and four research associates together with a number of visitors who have come from all over the world.

For more information see: www.cities.io
Squeezy Balls – a playful intervention to facilitate positive social interactions at work

Cities are full of large office buildings. Workers spend large amounts of time within these physically constrained spaces, often without talking to each other, not even for a polite greeting. Feelings of discontent and social isolation can often emerge. A prime example is the building we are located in at UCL which comprises 8 floors of offices, labs, long empty corridors and closed doors. While UCLIC and the ICRI are a hive of social activity, located in open plan spaces with mainly glass-fronted offices for faculty, the same does not hold for the rest of the building. We may visit the 5th floor occasionally for a meeting or the 6th floor to run a study but rarely go to another floor to see what is happening or to see who is around. You just don’t climb the stairs in the off chance of bumping into someone. As a result, the building is largely a series of horizontal spaces where people rarely connect with one another on the different floors. A two-storey building may just about work; but a building with more floors (in our case 8) can often lead to a silo mentality. As a result, there is a general perception in the building that people don’t know most of the other people in the same building.

We were interested in exploring whether a distributed technological intervention, based on the principles of playfulness, ambiguity and intrigue, could reverse this trend. Using a combination of physical computing and interactive visualisations we created a novel installation that was intended to make people stop, think and discuss what they felt about it and the issues it raised. In other words, an alternative digital water cooler – one that was playful and fun. We designed an input device – the Squeeze Box – that was placed outside the lift/stairwells of most of the floors. Each one consisted of a row of different coloured mood balls that afforded squeezing. Above them was a tantalizing poster that simply said ‘squeeze the colour of your mood’.

So what happened? After a one-month long deployment, it was found that this playful and lightweight intervention impacted on the workplace environment at several levels. Firstly, it provided the opportunity for personal reflection – many people had not thought about what mood they were in. This provided them with a new awareness – why did they feel they were having a yellow or a blue mood? Secondly, it provided an opportunity to appropriate and take ownership of it within the building so it became part of the fabric; for example, rules of use and games developed around the installations. Thirdly, it impacted on an interpersonal level by providing interesting conversational content for social interactions between colleagues. There were many occasions where Squeezy Balls facilitated new connections between people who had not spoken to each other before as well as strengthening existing connections between colleagues. A sense of pride and positivity was also reported – although a few professors thought it was ‘silly’ and beneath them to squeeze if someone else was around (some were observed moving towards a squeeze box only to swerve away when someone else came round the corner).

The installation has attracted considerable attention from a number of visitors. Moreover, several other organisations and councils in London, have identified their own work buildings and housing as being socially problematic and see the potential of adapting the Squeezy Balls installation for them, as a way of injecting some social playfulness and new sociality to see whether it improves them. We plan to follow up on these and see how what they do in other contexts. For us, it is a great impact story, demonstrating how our exploratory research can be taken up by others who, likewise, can see its value in their world.
A Day in the Interaction Research Lab

Reproduced from ACM Interactions magazine (dl.acm.org/citation.cfm?id=2533768&dl=ACM&coll=DL)

How do you describe your lab to visitors?

The University College London Interaction Centre (UCLIC, pronounced “you- click”) is an interdisciplinary research and teaching institute situated in the heart of London in Bloomsbury. University College London (UCL) was founded in 1826 and is home to some 10,000 staff and almost 25,000 students, and was recently ranked fourth in the QS world university rankings. UCLIC sits between the Department of Computer Science and the Psychology and Language Sciences Division. Our main space is located on the top floor of the computer science building, where we are treated to beautiful views over London. Additionally, we have an interaction research lab/studio and usability labs.

We also run an internationally renowned Master’s course in Human-Computer Interaction and Ergonomics, where students from a wide variety of backgrounds and from all over the world come together to learn about HCI, user experience and design, ergonomics, and cognitive science.

What is a unique feature of your lab?

We have been in existence for a very long time, beginning more than 35 years ago in the form of the Ergonomics Unit, and now as a growing, inter- nationally renowned HCI centre. We have a strong tradition in cognitive psychology, ergonomics, and computer science, but recently, with the arrival of Prof. Yvonne Rogers as director, together with Dr Paul Marshall and Dr Nic Marquardt, we have moved increasingly into design, social aspects of HCI, and physical computing. We have strong collaborative links across UCL and other universities, with local hospitals and other partners in industry (e.g., Microsoft, Google, Intel, Cisco). We also share a new space where 80 researchers from UCL and the BBC are collaborating on various future technology and UX projects. In addition, we are part of the new Intel Collaborative Research Institute (ICRI) for Sustainable and Connected Cities. We have been moving our research more into the wild and have been using our building as a test bed. Our projects and installations in the building change frequently, so visitors coming to our lab can always expect to see something different. We also have access to the new Institute of Making that is a cross-disciplinary research club for those interested in “the made world: from makers of molecules to makers of buildings, synthetic skin to spacecraft, soup to diamonds, socks to cities.”

How many people are in the lab, and what is the mix of backgrounds and roles?

There are more than 40 people in our lab, and it is continuing to grow — 11 faculty, 12 post-doc and research associates/fellows, and around 20 Ph.D. research students. People in our lab come from a wide variety of backgrounds, including psychology, computer science, design, social sciences, engineering, ergonomics, media, and industry. Each year, UCLIC also houses about 50 master’s students.

Briefly describe a day in the life of your lab. Every day is different. Some days we are very loud and busy, with everybody working toward a deadline (the recent CHI papers submission saw a record number of us frantically submitting papers just before the 1am deadline, local time); other days are considerably quieter. Being in the heart of London, we get many visitors passing through our lab, which is fantastic for networking at work and afterward. Right now we have visiting researchers from Korea, Mexico, and Europe. We also get visitors from North America, Japan, Australia, and Europe who drop in on their way to conferences in other parts of the world. We try to give them an opportunity to present their work and be subjected to UCLIC’s special style of feedback and audience participation.

What is the one feature of your lab you would not do without?

The heart of our lab is the “fishbowl.” It is a social space located in our main open-plan office, surrounded by glass, enabling people to see both in and out. It is a hive of activity, and where all the gossip, lab photos, etc. can be found. Members of the lab, staff and students alike, congregate for lunch, brown-bag meetings, and other discussions. We also have a tradition of bringing cakes in for birthdays and sweets/candy from our trips abroad. As the lab grows, we’re eating a lot more cake, and more unusual and exotic sweets are appearing every week!
What is the one feature of your lab that you want and don’t have?

While we make the most of our limited space and the facilities at hand, we would love to have more space in which to spread out—for example, a design studio, more labs to run studies in, and more social spaces to hang out in. But who doesn’t want more space?

Describe how people interact in your lab.

One great thing about UCLIC is that we talk to each other a lot and regularly socialize as a group. Throughout the year you will see Ph.D. students, postdocs, and professors eating lunch together in the fishbowl and going out after work to have a drink or a bite to eat in one of the many local pubs, restaurants, or bars. Our main office is open plan, so we see a lot of each other throughout the day and share a fair amount of banter. This can sometimes feel too noisy when writing, concentrating on analysis of data, or finding that last bug in a piece of code, but the buzz and vibe are viewed as a positive thing that helps foster the very friendly atmosphere in our lab.

What is the one thing you see as most important about what you do here?

Our interdisciplinary research is core to who we are. We have lots of collaborations with researchers in other UCL departments, U.K. and worldwide universities, and industry.

Our research feeds directly into our teaching. We are also very proud of our strong links with industry. It is not surprising that our M.Sc. graduates are very much in demand, as increasingly local, national, and international companies understand the importance of UX for their businesses.

PassivSystems KTP

Space heating is the biggest household use of energy in the UK – more than half of a typical home’s energy is used for this purpose, which is a substantial proportion of the UK’s national energy use and greenhouse gas emissions. As part of a TSB funded Knowledge Transfer Partnership, UCLIC and UCL Computer Science are working with a home energy management business, PassivSystems, to improve its home smart heating controls, so that its users are more engaged and save more energy.

We are trialling a prototype system to achieve both of these goals with 209 participants. Half the participants are receiving SMS messages from us, giving them enhanced feedback about how they use their heating, driven by a custom designed recommender system.

About 80% of the SMSs we send inform homeowners how much extra or less energy they are using when they change their heating settings. Other SMSs encourage homeowners to use system features that they have not used in the last month. We also have an SMS that helps homeowners to use their heating systems with less effort, and as such represents a permanent change to the management of their heating settings, thus reducing the need to make frequent temporary changes. If they text back ‘YES’ to this SMS, this change can be made by us on their behalf. The trial closes after Easter.
The Hearing Body

The sounds that accompany almost every bodily movement that we produce are rich in information about our body and the space immediately surrounding it. For instance, the sounds produced when tapping on a surface contain information about the location of our hand, from which we can derive how long our arm is, and these sounds also contain information about the strength our arm is applying when tapping. The Hearing Body project aims to explore how sound is used to build a sense of our own body. This sense of body is essential for a successful interaction with the environment, as it is tightly linked to action planning, self-esteem and social interaction. While this sense of body is known to be quite malleable in response to some sensory cues, such as visual and tactile body-related cues, currently, there is no solid evidence linking auditory information to the sense of body.

The Hearing Body project is a multidisciplinary and innovative research project that aims to provide novel insights into the nature of the sense of one’s body by exploring how sound can be used to alter this sense of body. The project ultimately aims to guide the design of audio-based applications that can improve body-image, self-esteem, movement patterns and social interactions to support well-being and rehabilitation for people with movement impairments.

The project is led by Dr Ana Tajadura-Jiménez and funded by the ESRC Future Research Leader scheme. This is a very competitive scheme that supports outstanding early career researchers to carry out excellent research and to develop all aspects of their research and knowledge exchange skills.

Citizen Cyberlab

When scientists want to conduct some research but the work is too much for them to do by themselves, what can they do? One solution is to ask the general public for help. This approach is known as ‘citizen science’ – professional scientists working together with members of the public – ‘citizen scientists’ to conduct scientific research. Designers of citizen science projects tend to focus mostly on the science. They ask questions such as ‘how can we be sure that the work of citizen scientists is of a high quality?’ and ‘can we trust data collected and/or analysed by citizen scientists?’ However, it is crucial to also think about the perspective of the citizen scientists – after all it would not be much of a project without a group of willing volunteers. Citizen Cyberlab is an EU ICT project funded under the 7th Framework programme with a consortium team of seven partners from across Europe. The aim of our project is to explore learning and creativity in online citizen science projects. Why do members of the public volunteer to take part in these projects? What kinds of learning and creativity do citizen scientists experience when participating? How can we design projects to make them as engaging as possible?

During the next three years we will be exploring these questions and more, with the intention of developing best practices for the design and evaluation of citizen science projects.
Errordiary – a public engagement innovation

If you’ve recently made an error, or have created a clever resilience strategy to prevent one, then share it on Errordiary!

www.errordiary.org is a public engagement website that has three main parts:

1. **A human error stream**
   where people share the errors that they make and come across on a daily basis.

2. **A resilience strategies stream**
   where people share the resilience strategies that they create and come across on a daily basis.

3. **A ‘Discovery Zone’**
   that contains stories, videos, photos, research, teaching materials, games, news clippings, competition and a discussion forum around the topic of error and resilience.

You can share errors and avoidance strategies on Errordiary through Twitter (using #errordiary or #rsdiary) or directly through the website. Since 2009 we have accumulated over 2,000 errors and over 300 resilience strategies.

Errordiary brings public engagement, research and teaching about human error closer together. In terms of public engagement we recently ran a project that attracted an extra 6,000 visitors to the site as well as holding a tweetchat for people with diabetes and given talks to medical professionals. In terms of research, we have published on making resilience strategies more tangible and developing the idea of a MOOD (Massively Open Online Diary) for citizen science.

In terms of teaching, we use the data to teach students about human error categorisation schemes and are informed that it is starting to be used for similar purposes at other universities in the UK and abroad. Further information can be found in the Discovery Zone.

Human error is a central theme for HCI and Ergonomics that has the ability to engage a broad audience. We strongly believe that we should learn from error rather than trying to hide it, that errors are not always the fault of the individual, and that system changes can be made to reduce the likelihood of error in the long term for everyone. Stopping at human error usually satisfies the need for blame and to find a scapegoat, but it masks the interesting factors that have contributed to the error along the way – including design (e.g. see Microwave Racing).

We’re aiming to develop a community around Errordiary – please have a look at the site, register and contribute. Get in touch with Dom Furniss if you have any comments or queries.

In parallel, we’re also running a Games Design Competition to produce a game that can raise awareness of the blame culture around human error and get players to reflect on how individuals are blamed even when the wider system is at fault. If you have any questions about the competition, please email the competition chair, Dr Jo Iacovides.
At the start of January, a two-week ‘Winter School on Ubiquitous Computing’ was held as part of the UbiHealth project. The Winter School took place at the National Institute of Astrophysics, Optics and Electronics (INAOE), located in the town Tonantzintla, in the Mexican state of Puebla. Students and researchers from different UCL departments, including UCLIC, ICRI Cities and the E-Health Unit, attended the School and had a chance to meet researchers and students from South America, USA, Italy and Turkey. While those two weeks in Mexico were full of lectures and workshops, there was also time for socialising and sightseeing.

During the Winter School, researchers from the different universities taking part in the UbiHealth project gave seminars on topics related to the use of technology in healthcare. Sensor networks, assistive technology and the quantified self were all covered.

To keep everyone engaged throughout the two weeks (especially those less familiar with the two-hour talks without breaks), the Winter School also had a large group work component. Groups were formed with attendees from a mix of universities, and all groups were free to develop anything related to the theme of the School. Despite the openness of this brief and the language barriers that had to be overcome in some groups, everyone managed to successfully put together an initial presentation of their idea after the first week. Using the feedback from the senior researchers on these presentations, the groups then developed their idea in the second week; some groups even managed to create working prototypes of their apps.

The Winter School was a great opportunity to meet researchers from other countries who are also involved with the UbiHealth project. PhD students and postdocs were given a chance to present posters describing their work and it was interesting to see the breadth of topics and research interests. During the official poster presentation session the atmosphere was friendly and casual. Instead of formal presentations, everyone - including the presenters – moved around the room and chatted about research.

We also had a chance to participate in an Arduino workshop led by Dr Nic Marquardt from UCLIC. It was the first time we got to play with EngDuinos – Arduino boards developed by UCL Engineering department for educational purposes. Nic also showed us how to measure heart rate and use other medical sensors. It was a fun experience for everyone involved.

Final group presentations were given on the last day of the Winter School, after which all members received their UbiHealth Winter School certificate. All in all, it was a memorable, productive and enjoyable two weeks, in (surprisingly cold) Mexico.
Update on Dream Fellowship

My EPSRC Dream fellowship, started at the beginning of 2012. While everyone else was struggling with the severe weather in the UK, I disappeared for a few months to sunny South Africa. I did the same the following year, only this time heading off to Australia. The reason for taking these mini-sabbaticals in far flung places was to give myself some time to think and imagine while not getting caught up in the day-to-day distractions and demands of UCLIC (although it was difficult to escape from 24/7 email and Skype). I had set myself the goal of rethinking the relationship between ageing, computing and creativity. I wanted to find new ways of making computers engaging, accessible and exciting to as many people as possible, with a focus on people who are getting older and retiring.

To begin, I looked at the changes afoot in being creative in contemporary cooking and dining practices. I took a Louis Theroux ethnography approach, visiting a number of pop-up restaurants and talking to various cutting edge, free-spirited chefs, wine-makers and artists about how they work in, around, with and through the modern digital world. It was fascinating and enlightening to see their worlds in flux and how they have been taking up and using technology in their work, including laser cutters, sensors and social media. This early foray into others’ creativity was inspiring, leading to my own insights and imaginings. Moreover, it got me thinking quite differently about creating technology for creativity – many of the ideas I have shared in my blog entries, academic writings and talks. And the rest is still fire in the belly.

My Dream fellowship officially ended in February 2014. I returned to Cape Town where it all started. The original plan was to come back for a short time to reflect on what I have done and achieved. In looking back, I realized I am all the time looking forward. Dreams of how to change the world don’t stop when the funding stops. They take a new turn, changing direction; expanding, contracting and transforming. My dream, far from being over, has led to new ideas, opportunities, and ventures.

But life can suddenly stop, short. Tragically, my wonderful host, gentle colleague and dear friend in Cape Town, Prof. Gary Marsden, died suddenly and unexpectedly of a heart attack on the 27th December 2013, aged only 42. He, too, had a dream of how to change the world. But we’ll never be able to share our respective dreams again over a proper coffee looking up at Table Mountain. It is a bitter-sweet ending to my dream fellowship; but memories of Gary’s playful, generous, and intelligent spirit will live on and be there to shape my next steps.

Update on ILHAIRE

The ILHAIRE project was recently featured on the New Scientist website following the ‘CS Unveiled’ open day at the Computer Science Department UCL. The article describes the work done at UCLIC in capturing natural laughter-related body movements and its application to visual laughter synthesis. This work was initiated as part of the ILHAIRE project and developed as part of an MSc project in 2012.

A machine-learning study to automatically identify laughter types on the basis of body movements was also carried out and a combined report was presented at ACII 2013, where it received the Outstanding Paper Award.

PLAY
Update on UK-VAC

How can we manage, process and interact with large bodies of unstructured data to solve real-world problems? This is the challenge being addressed by the Visual Analytics community. UCLIC is a founding member (with Bangor, Imperial, Middlesex and Oxford) of the UK Visual Analytics Consortium. In September 2012, we hosted a Visual Analytics Workshop at UCL, bringing together researchers and practitioners involved in VA from many different perspectives, including data mining, information visualization, user interaction, and sensemaking. Sheila Pontis joined UCLIC in December 2012, with a remit to better understand how people interact with unstructured data to address ill-defined questions such as identifying influential people in a community. We conducted a laboratory study in which people were invited to identify current and future leaders in two academic domains (HCI and Chemistry). Some participants were new to research (HCI-E Masters students) while others were experienced HCI researchers (with more than five years experience). Whereas most previous studies of expertise in interacting with information have focused on search expertise and domain expertise, this study design enabled us to focus on the roles of domain expertise (in HCI but not in Chemistry) and professional expertise (as researchers). We found that people use both external and internal knowledge resources to define a starting point for understanding ‘influence’, and then to make and validate decisions. Poorly defined initial frames typically caused people to make poorly founded or arbitrary decisions, and more experienced researchers were more likely to give up rather than to make poorly evidenced decisions (Pontis and Blandford, forthcoming). We are currently relating this same dataset to Klein et al’s (2007) theory of sensemaking in order to test and extend that theory by applying it to a kind of sensemaking task that has not previously been considered. We are also working with colleagues at Imperial and Middlesex to test the feasibility of recording and utilising the provenance of previous analyses to aid sensemaking.

Update on CHI+MED

The CHI+MED Programme is currently in its fifth year, and is continuing to investigate the use and safety of interactive medical devices. The PhD students linked to the programme have achieved some notable successes:

- **Sandy Gould** has been awarded an EPSRC Doctoral Prize which provides a 2 year fellowship starting in Autumn 2014. He will be staying at UCLIC to work on a project investigating how interruptions impact on remote workers.

- **Atish Rajkomar** has been awarded his PhD on ‘Augmenting Distributed Cognition Analysis For Home Haemodialysis: From a System of Representations To Systems of Activity-Centric Interactions’.

- **Sarah Wiseman’s** paper ‘Designing devices with the task in mind: which numbers are really used in hospitals?’, Human Factors, 2013 (DOI: 10.3410/f.718018327.793478226), has been selected for F1000Prime. The same paper was a finalist in the Human Factors Journal Prize 2012.

- **Sarah Wiseman** appeared on Watchdog on the BBC talking about number entry errors.

Situated studies in healthcare continue to pose many challenges (from obtaining ethical clearance to conduct studies at all through to learning how to publish in the medical literature, which has a completely different set of expectations and practices to the HCI literature). As well as reporting findings in the literature, we have been working with researchers at other institutions, internationally, to deliver guidance on lessons learned about doing qualitative studies. This has resulted in two companion volumes of case studies (Furniss et al, 2014) and guidance (Furniss et al, forthcoming) on conducting situated studies in healthcare and an invited encyclopaedia chapter (Blandford, 2014) on designing, conducting and reporting semi-structured qualitative studies.

Ann Blandford was awarded a Royal Society International Exchange grant, which supported a visit to several sites in North America (see blog at also http://aebus2013.blogspot.co.uk) and a return visit to UCL by Ayse Gurses and Ant Ozok from Johns Hopkins. This pump-primed follow-on work with groups at Johns Hopkins, Brigham & Women’s Hospital Boston, and the University Health Network Toronto, and also set the scene for presenting at the AAMI/FDA Annual Summit, which focused on Home Healthcare in 2013.
UCLIC Profiles

Nicolai Marquardt

Nicolai joined UCLIC in September 2013 as a Lecturer in Physical Computing. He completed his PhD at the University of Calgary (Canada) working with Saul Greenberg at the Interactions Lab and GroupLab. Nicolai worked as intern with Microsoft Research in Cambridge and Redmond, together with Abigail Sellen, Richard Banks, Alex Taylor, and Ken Hinckley. His research interests are ubiquitous computing, digital fabrication, interaction with large surfaces, prototyping toolkits, and physical user interfaces. With his research of proxemic interactions, he is exploring the design of devices that have fine-grained knowledge of people’s and devices’ proxemic relationships, and how this can be exploited in ubicomp interaction design. One of Nicolai’s passions is the application of sketching and prototyping techniques, in which area he also co-authored the Sketching User Experiences Workbook (Morgan Kaufmann 2011) together with Saul Greenberg, Sheelagh Carpendale, and Bill Buxton.

Ana Tajadura

Ana joined UCLIC in November 2012 as a research fellow and principal investigator of The Hearing Body project. She completed her DPhil in December 2008 at Chalmers University of Technology, Sweden, looking at spatial and multisensory determinants of auditory-induced emotion and self-representation. In 2009 she moved to UK to work as a post-doc at the Lab of Action and Body, at Royal Holloway, on the ESRC funded project ‘Looking for myself: interactions between multisensory integration and recognition of one’s own face’ (www.esrc.ac.uk/my-esrc/grants/RES-061-25-0233/read). Her current research interests include understanding how sound and other multisensory cues can be used to change the sense of one’s body and to induce specific changes in behaviour and emotional states. She wants to apply her research outcomes to design audio-based technology that improves body-image, self-esteem and movement patterns to support wellbeing.

Lorna Wall

Lorna Wall (née Brown) is a Teaching Fellow at UCLIC and a Research Associate in the Intel Collaborative Research Institute, based at UCL. She completed her PhD in HCI at the University of Glasgow in 2006, on the topic of Tactons (structured vibrotactile messages for non visual information display), supervised by Professor Stephen Brewster. She then went on to work as an HCI/Usability Researcher for companies including Sony Computer Entertainment Europe, Vodafone and Microsoft Research for seven years before joining UCLIC in 2013.

In her teaching, Lorna draws on examples from her industrial experience to demonstrate how HCI is used in industry and to help prepare students with the skills needed for HCI careers. Her research interests include haptic and audio interaction, accessibility, sustainable and connected cities, in-the-wild studies of technology, and the evaluation of entertainment technologies such as games.

Temi Olugbade

Temi is from Nigeria and did her undergraduate study in Computer Engineering at Obafemi Awolowo University, Ile-Ife, Nigeria. She studied MSc Intelligent Systems at the University of Sussex. She is currently in her first year of PhD at UCLIC, with funding from the Presidential Special Scholarship Scheme for Innovation and Development. Her general interests include artificial intelligence, affect, biometrics, and astronomy and her research interests lie in affective computing and human-robot interaction. Her PhD research, being supervised by Nadia Berthouze and Nicolai Marquardt, is on using affective computing to facilitate chronic pain rehabilitation where the therapist is an artificial agent. When out of the office, she likes to go salsa dancing, sightseeing, or movie-watching.
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