

**CHANG HEE LEE** PhD FRSA

www.changheelee.com  
changhee.lee@kaist.ac.kr  
changhee.lee@network.rca.ac.uk

Updated September 2021

## EDUCATION

### **Royal College of Art (RCA), London, UK**

**PhD** 2014 - 2018

Innovation Design Engineering, School of Design  
Supervisors & Advisor: Dr. Dan Lockton, Dr. John Stevens and Professor Ashley Hall

Doctoral Thesis: Synaesthesia Materialisation: Approaches to Applying Synaesthesia as a Provocation for Generating Creative Ideas within the Context of Design

### **Goldsmiths, University of London, UK**

**MA** 2012 - 2013

Design Critical Practice, School of Design

### **Central Academy of Fine Arts (中央美术学院), Beijing, China**

**BA** 2005 - 2009

Industrial Design, School of Design

### **Beijing Huijia Private School, Beijing, China**

**High School** 2003 - 2005

One year early graduation / Grade skipping

## ACADEMIC APPOINTMENTS

### **KAIST (Korea Advanced Institute of Science and Technology)** *September 2021 - Present*

**Industrial Design, School of Engineering**

**Director of Affective Systems and Cognition Lab**

**Assistant Professor (Tenure Track)**

- Director of Affective Systems and Cognition lab—explores future of wellbeing, future of senses and future of creativity
- Support research and teaching undergraduate, masters and PhD students.
- Develop departmental research and curriculums.

### **Royal College of Art (RCA), London, UK** *September 2021 - Present*

**Computer Science Research Centre (CSRC), Royal College of Art (RCA), London, UK**

**Visiting Research Fellow**

- Support PhD students
- Knowledge exchange

### **Royal College of Art (RCA), London, UK** *October 2018 - August 2021*

**Innovation Design Engineering, School of Design—with Imperial College London (ICL)**

**Tutor (equivalent to US Non-Tenure Track Assistant Professor)**

**2<sup>nd</sup> year Programme Leader**

- Head of 2nd year IDE programme.

- Organise lectures, weekly tutorial schedules and events.
- Direct and curate exhibition spaces for the programme.
- Supervise PhD students
- Assess students' projects and thesis.
- Develop departmental research and continue personal research in synaesthesia, HCI, interaction design, creativity and experience design.
- Support design and technical aspects for students' projects.
- Run and coach project collaboration between RCA and CERN in Geneva.

**Royal College of Art (RCA), London, UK** *February 2020 – July 2020*  
**Design Product, School of Design**  
**Visiting Lecturer (equivalent to US Adjunct Faculty)**

- Supported tutorials-based teaching to postgraduate students.

**Royal College of Art (RCA), London, UK** *August 2016 – March 2017*  
**Innovation Design Engineering, School of Design—with Imperial College London (ICL)**  
**Visiting Lecturer (equivalent to US Adjunct Faculty) / Casual Worker—initial request was to support the team as a Visiting Lecturer but had to take the role as a Casual Worker due to VISA issues.**

- Give and organise weekly tutorials to postgraduate students for the project—Grand Challenge
- Support design and technical aspects for students' projects.
- Create films for project briefs.
- Set up exhibition space.
- Record student activities.

## **GUEST TEACHING**

**Carnegie Mellon University, Pittsburgh, USA** *April 2017*  
**Guest Instructor, School of Design**

- Syllabus: Spring 2017: Environments Studio IV: The Invisible  
 (Workshop: creating robots using synaesthesia as provocation)

## **HONORS / NOMINATIONS / AWARDS**

Nominated by the Royal Society of Arts (RSA), London, UK *2020*  
**Fellow (Invited) of the Royal Society of Arts (FRSA)**

Awarded by ACM SIGCHI Designing Interactive Systems (DIS 2018), Hong Kong *2018*  
**Best Provocation Award (Top 2%)—DIS 2018, PWIP**

Nominated by Overseas Korean Foundation (OKF), Seoul, South Korea *2016*  
**Korean Future Leader**

Nominated by UK Design Council, London, UK *2015*  
**70 Ones To Watch - 70 emerging design talent that will shape UK's design future.**

Nominated by Daum Media, Seoul, South Korea *2015*  
**Today's Figure**

Awarded by International Design Award (IDA), Los Angeles, USA 2014  
**Silver Prize**

Awarded by A'Design Award, Milan, Italy 2013  
**Bronze A'Design Award**

## TALKS

**MIT Media Lab, Cambridge, Massachusetts, USA** *May 2021*

Talk for the SpaceCHI 2021 workshop at the Conference on Human Factors in Computing Systems (CHI) of the Association for Computing Machinery (ACM)

**Harvard University, Cambridge, Massachusetts, USA** *October 2017*

Guest speaker for the Twelfth National American Synaesthesia Association Conference.

**Institute of Philosophy, University of London, UK** *May 2017*

Symposium contributor for the Open Senses Festival.

**Carnegie Mellon University, Pittsburgh, USA** *April 2017*

Synaesthesia as inspiration

**Royal College of Art, London, UK** *December 2016*

Synaesthesia as provocation

**University College London (UCL), London, UK** *September 2016*

Guest speaker for workstations, Science has No Borders

**University College London (UCL), London, UK** *August 2016*

Guest speaker for a film night – Film: Like Water for Chocolate

**Royal College of Art & University of Oxford, UK** *July 2016*

Symposium organiser and presenter for the joint symposium between the Royal College of Art and the University of Oxford - Crossing Over: The Art & Science of Multisensory Perception.

**Future Leader Conference, Seoul, South Korea** *October 2015*

Conference keynote speaker

**Camden Arts Centre & Kingsgate Workshop Trusts, London, UK** *June - July 2015*

Symposium keynote speaker for the The Lab Project: Multisensory Perception and Synaesthesia

## REVIEWING & JUDGING

**ACM TEI 2022—Associate Chair** 2022

**IASDR 2021—Associate Chair** 2021

**DRS (Design Research Society)—Reviewer** 2021

**Journal of Textile Design, Research and Practice—Reviewer** 2020

**ACM DIS2020—Jury Member for ACM DIS2020 Student Design Competition** 2020

**ACM DIS2019—Reviewer for Pictorial Papers for ACM DIS2019** 2019

## CURRENT PHD STUDENTS

**Brendan Commane**, Helen Hamlyn Design Centre & School of Design, Royal College of Art. 2020 –

Research Keywords: Dementia, Assistive Technology, Design, Human-Interaction, Tool, Human Factors etc.

**Yuqian Sun**, Computer Science Research Centre (CSRC) & School of Design, Royal College of Art. 2021 –

Research Keywords: AI, Game, Interaction Design, Human-Computer Interaction, Design etc.

## PUBLICATIONS (Conference & Journal)

1. Lee, C.H and Balint, T (2021). Martian Delight: Exploring Qualitative Contact for Decoupled Communications, **Acta Astronautica**, ISSN 0094-5765, DOI: <https://doi.org/10.1016/j.actaastro.2021.06.051>
2. Ferrarello, L, Fiadeiro, R.P.C, Hall, A, Galdon, F, Anderson, P Grinyer, C, Stevens, J, and Lee, C.H (2021). Learning Remotely through Diversity and Social Awareness. The Grand Challenge approach to tackle societal issues through diversity and creative thinking, **DRS (Design Research Society)** DOI: tbc
3. Kim, R, Pschetz, L, Linehan, C, Lee, C.H, and Poslad, S. (2021). Archives in DNA: Workshop Exploring Implications of an Emerging Bio-Digital Technology through Design Fiction. **Mindtrek 2021 (Mindtrek '21)**, June 1–3, 2021, Tampere/Virtual, Finland. ACM, New York, NY, USA, 4 pages. <https://doi.org/10.1145/3464327.3464966>
4. Lee, C.H, Balint, T, Kim, R, and Sommer, B. (2021). Decoupled Communication System for Long-Duration Space Missions?. **SpaceCHI'21: Human-Computer Interaction for Space Exploration (CHI Workshop Position Paper)**, May 14, 21. ACM, New York, NY, USA.
5. Lee, C.H, and Balint, T, (2020). Martian Delight: Exploring Qualitative Contact for Decoupled Communications, **71st International Astronautical Congress (IAC)**, Dubai, UAE.
6. Gong, W.L, Xiao, L, Wang, X.H, and Lee, C.H. (2020). Dots — An Inclusive Natural User Interfaces (NUI) for Spatial Computing, **ACM SIGCHI MobileHCI'20**, Oldenburg, Germany. DOI: <https://doi.org/10.1145/3406324.3410715>
7. Sommer, B, Lee, C.H, Nat, M, and Torrisi, V.S, (2020) Immersive Design Engineering, **Electronic Imaging**, (SD&A), XXXI, pp. 265-1-265-16(16).
8. Lee, C.H, Lockton, D, Stevens, J, Wang, S.J, and Ahn, S.H. (2019). Synaesthetic-Translation Tool: Synaesthesia as an Interactive Material for Ideation, **ACM CHI'19**, Glasgow. DOI: <https://doi.org/10.1145/3290607.3312849>

9. Balint, T and Lee, C.H., (2019). Pillow Talk—Curating Delight for Astronauts, **Acta Astronautica**, Volume 159, Pages 228-237. DOI: <https://doi.org/10.1016/j.actaastro.2019.03.048>
  
10. Wang, S.J, Zhang, L, Lee, C.H., and Moriarty. P. (2019) The Scope of Innovative Design In Enhancing Energy Efficiency, **International Conference on Applied Energy (ICAE)**, Västerås, Sweden.
  
11. Lee, C.H., Lockton, D and Kim, J.E, (2018). Exploring Cognitive Playfulness Through Zero Interactions, **ACM SIGCHI DIS'18**, Hong Kong. DOI: <https://doi.org/10.1145/3197391.3205413> **\*\* (Best Provocation Award—top 2%)\*\***
  
12. Lee, C.H. and Lockton, D, (2018). Silent Scene, **ACM Interactions'18 Demo**, 25, 6, 10-13. DOI: <https://doi.org/10.1145/3279993>
  
13. Balint, T and Lee, C.H., (2018). Pillow Talk—Curating Delight for Astronauts, **69th International Astronautical Congress (IAC)**, Bremen, Germany.
  
14. Lee, C.H., (2018). Synaesthesia Materialisation: Approaches to Applying Synaesthesia as a Provocation for Generating Creative Ideas within the Context of Design, **PhD Thesis**, Royal College of Art, School of Design, Innovation Design Engineering Research, UK.
  
15. Lockton, D., Ricketts, D, Chowdhury, S.A and Lee, C.H., (2017). Exploring Qualitative Displays and Interfaces, **ACM CHI'17**, Denver, CO, USA. DOI: <http://dx.doi.org/10.1145/3027063.3053165>
  
16. Ferrarello, L., Hall, A, Kann, M and Lee, C.H., (2017). Collaborating Design Risk, **International Association of Societies of Design Research (IASDR)**, Ohio, USA.
  
17. Lee, C.H., (2017). Three Studies of Synaesthesia, **ACM Interactions '17 Demo**, 24, 3, 8-11. DOI: <https://doi.org/10.1145/3068337>

## **PUBLIC KNOWLEDGE EXCHANGE**

SHOW RCA 2019

**Curated the whole show for the IDE programme**

ACM CHI2019 2019

**Poster Presentation**

ACM DIS2018 2018

**Poster Presentation**

The Center SF, San Francisco, USA 2018

**Synaesthesia: Art, Love & Science**

Rebecca Hossack Gallery, London, UK *2017*  
**Open Senses Festival**

ACM CHI2017 *2017*  
**Poster Presentation**

Lloyd's Register Foundation Headquarter, London, UK *2017*  
**Design For Safety at Sea**

University College London (UCL), London, UK *2016*  
**Doing It Together Science (DITOs)**

Royal College of Art (RCA), London, UK *2016*  
**Crossing Over: The Art & Science of Multisensory Perception**

Royal College of Art (RCA), London, UK *2016*  
**Amnesty of Rejection Redux**

Royal College of Art (RCA), London, UK *2016*  
**Work in Progress Show**

Henry Moore Gallery, Royal College of Art (RCA), London, UK *2015*  
**Work in Progress Show**

Former BBC Headquarter, London, UK *2013*  
**Touch Art Fair**

Hoxton Gallery, London, UK *2013*  
**London Design Festival**

Mood Museum of Design, Milan, Italy *2013*  
**A'Design Award**

Mumbai, India *2013*  
**Product Design Days**

Gdansk, Poland *2013*  
**About Design Expo**

Central Academy of Fine Arts, Beijing, China *2009*  
**Graduation Exhibition**

## PORTFOLIOS & PRESS & NEWS

<https://www.changheelee.com>

## SKILLS

### Embedded Systems:

Atmel AVR, PCB Design, EAGLE PCB, Arduino IDE, etc.

### Fabrication:

3D Printing, CNC, Laster Cutting, Carpentry, etc.

### Software:

EAGLE pcb, Rhino 3D, 3ds Max, V-Ray, Photoshop, Wondershare, Filmora, etc.

## LANGUAGES

### English

Fluent

### Chinese

Fluent

### Korean

Fluent

## OTHER EXPERIENCE & ACTIVITIES

### Swimming indoor marathon for people with diabetes

22miles (equivalent of swimming length from the UK to France), UK

*February - May 2018*

### Librarian

Big Tree Library, Seoul, South Korea

*November 2011 - June 2012*

### Civilian Document Analyst Assistant

Mandatory Military Service, Seoul, South Korea

*October 2009 - October 2011*

## REFERENCES

**Dan Lockton**—Director of Imaginaries Labs & Assistant Professor at Eindhoven University of Technology & Courtesy Appointment at Carnegie Mellon University (CMU).

Contact Address: [d.j.g.lockton@tue.nl](mailto:d.j.g.lockton@tue.nl)

**Dr. Bjorn Sommer**—Head of 1<sup>st</sup> Year Programme & Tutor (Assistant Professor) in Innovation Design Engineering at the Royal College of Art & Imperial College London.

Contact Address: [ashley.hall@rca.ac.uk](mailto:ashley.hall@rca.ac.uk)

**Dr. Tibor Balint**—Principal Researcher / Designer / Engineer at JPL NASA.

Contact Address: [tibor.balint@jpl.nasa.gov](mailto:tibor.balint@jpl.nasa.gov)