

CHANG HEE LEE PhD FRSA

www.changheelee.com
changhee.lee@network.rca.ac.uk
+44 7562 747291

Updated June 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

Korea Advanced Institute of Science and Technology, South Korea *September 2021 - Present*
Industrial Design, School of Engineering
Director of Affective Systems and Cognition Lab
Assistant Professor (Tenure Track)

- Direct a lab to explore three themes—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 *October 2018 - August 2021*
Innovation Design Engineering, School of Design—with Imperial College London (ICL)
Tutor (equivalent to US Non-Tenure Track Assistant Professor)
2nd 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 issue.

—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

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 Commene, 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, (2021). Martian Delight: Exploring Qualitative Contact for Decoupled Communications, **Acta Astronautica** (Upcoming: will be published soon)
2. 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>
3. 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.
4. Lee, C.H, and Balint, T, (2020). Martian Delight: Exploring Qualitative Contact for Decoupled Communications, **71st International Astronautical Congress (IAC)**, Dubai, UAE.
5. 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>
6. Sommer, B, Lee, C.H, Nat, M, and Torrissi, V.S, (2020) Immersive Design Engineering, **Electronic Imaging**, (SD&A), XXXI, pp. 265-1-265-16(16).
7. 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>
8. 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>
9. 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.
10. 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%)****
11. Lee, C.H and Lockton, D, (2018). Silent Scene, **ACM Interactions'18 Demo**, 25, 6, 10-13. DOI: <https://doi.org/10.1145/3279993>

12. Balint, T and Lee, C.H., (2018). Pillow Talk—Curating Delight for Astronauts, **69th International Astronautical Congress (IAC)**, Bremen, Germany.

13. 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.

14. 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>

15. Ferrarello, L., Hall, A, Kann, M and Lee, C.H., (2017). Collaborating Design Risk, **International Association of Societies of Design Research (IASDR)**, Ohio, USA.

16. 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

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

Professor. 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

Professor. Ashley Hall—Head of Healthcare & Design (MRes) at the Royal College of Art.
Contact Address: ashley.hall@rca.ac.uk

Dr. Tibor Balint—Principal Researcher / Designer / Engineer at JPL NASA.
Contact Address: tibor.balint@jpl.nasa.gov