

# DanbeeKim

Teacher | Field Neuroscientist | Author

## CONTACT

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## LANGUAGES

English (fluent),  
Korean (intermediate),  
Portuguese (beginner)

## COMPUTER SKILLS

Microsoft Office Suite,  
Illustrator, Photoshop,  
Premier Pro, Bonsai-Rx,  
Github, L<sup>A</sup>T<sub>E</sub>X, Python

## FABRICATION TOOLS

Epilog Helix Laser  
Cutter, sewing  
machine (standard  
and overlocking)

## MOVEMENT ARTS

capoeira, fire spinning,  
musical theater

## INSTRUMENTS

bass guitar, ukelele,  
violin, vocals

## REFERENCES

available upon request

## MISSION

To create interactive, empowering methods for studying nervous systems in ecologically relevant settings.

## EDUCATION

2013-2020 **DOCTOR OF PHILOSOPHY IN NEUROSCIENCE** Chantalimaud Centre for the Unknown  
International Neuroscience Doctoral Programme, Intelligent Systems Lab  
Thesis title: *On the aims and methods of Field Neuroscience: Non-invasive techniques for studying nervous systems in natural settings*

2005-2009 **SCIENTÆBACCULAUREUS** Massachusetts Institute of Technology  
*Brain and Cognitive Sciences*

## EXPERIENCE

since 2021 **NEUROGEARS, LTD** London, UK  
*Research Scientist, Outreach*

since 2021 **THE BARTLETT SCHOOL OF ARCHITECTURE, UCL** London, UK  
*Tutor, MArch Design for Performance and Interaction*

since 2010 **APPALACHIAN INSTITUTE FOR CREATIVE LEARNING** Mars Hill, North Carolina, USA  
*Teacher and Staff*

since 2006 **FIRST-YEAR LEARNING COMMUNITIES, MIT** Cambridge, Massachusetts, USA  
*Undergraduate Teaching Fellow and Alumni Mentor, Terrascope*

## PUBLICATIONS AND EXHIBITS

Danbee Kim, Kendra Buresch, Roger Hanlon, Adam R. Kampff. "An experimental method for evoking and characterizing dynamic color patterning of cuttlefish during prey capture". *In prep.*

Danbee Kim. *The First VIRS*. London; 2020.

Danbee Kim, Adam R. Kampff. "Neuroscience Does Design: What the Brain's Architecture Can Teach Architects". *Architectural Design*, 90.6 (2020): 94-99. DOI: 10.1002/ad.2637.

André Marques-Smith, Joana P. Neto, Gonçalo Lopes, Joana Nogueira, Lorenza Calcaterra, João Frazão, Danbee Kim, Matthew G. Phillips, George Dimitriadis, Adam R. Kampff. "Recording from the same neuron with high-density CMOS probes and patch-clamp: a ground-truth dataset and an experiment in collaboration". *Bioarxiv*, 2018. DOI: 10.1101/370080.

Danbee Kim. "Why I refuse to do animal testing in my science career". *Massive Science*. June 18, 2018.

Darío R. Quiñones, Gonçalo Lopes, Danbee Kim, Cédric Honnet, David Moratal, Adam Kampff. "HIVE Tracker: a tiny, low-cost, and scalable device for sub-millimetric 3D positioning". *Augmented Human*, 9 (2018). DOI: 10.1145/3174910.3174935.

Gonçalo Lopes, Danbee Kim. "How theater, start-up culture, and business history helped us become better neuroscientists". *Massive Science*. Oct 16, 2017.

Danbee Kim, Gonçalo Lopes. "Does modern neuroscience really help us understand behavior?" *Massive Science*. Oct 3, 2017.

*Surprising Minds*. Interactive installation and crowd human behaviour experiment. Installed 4 July 2017 at Sea Life Brighton, Brighton, UK. Danbee Kim, Kerry Perkins, Clive Ramble, Hazel Garnade, Gonçalo Lopes, Darío R. Quiñones, Reanna Campbell-Russo, Robb Barrett, Martyn Stopps, The EveryMind Team, Adam Kampff.

## EXPERIENCE CONTINUED...

- since 2019 **NEURONAUTAS** Lisboa, Portugal  
*Teacher and Staff*
- A hands-on neuroscience and robotics camp for local 10th-grade students, originally hosted at the Champalimaud Centre for the Unknown
  - Assisted in procuring €30,000 of funding from Fundação Calouste Gulbenkian
  - Collaboratively developed and delivered program curriculum for in-person edition in 2019
  - Translated neuroscience curriculum into online coursework and organized online classroom experience for remote edition in 2021
  - Developed and delivered an additional short course for 2021 edition that combined neuroscience theory with speculative fiction and collective improvisational storytelling
- 2016-2019 **SAINSBURY WELLCOME CENTRE FOR NEURAL CIRCUITS AND BEHAVIOUR** London, UK  
*Visiting Researcher, Intelligent Systems Lab*
- AWARDS:**
- SWC Public Engagement Fund: £3,000 (Feb 2019)
  - UCL Train and Engage program: £1,000 (July 2018)
- EVENTS:**
- "Dear Neuroscience: Touch and Proprioception", Organizer and Speaker (24 May 2019)
  - 2017 Systems Seminars Annual Symposium: Cross-Species Conversations, Organizing team (21 Sept 2018)
  - "Orchestrating the Brain: A collaborative workshop of musicians and neuroscientists", Organizer and Speaker (31 May 2018)
- SOCIETIES AND WORKING GROUPS:**
- SWC-Gatsby PhD Society, Social Chair (May 2018 - May 2019)
  - SWC Staff Student Consultative Committee, Student representative (Oct 2017 - Oct 2018)
  - SWC NC3Rs working group, Member (July 2017 - July 2019)
  - SWC Public Engagement Network, Member (Jan 2016 - July 2019)
- 2005-2019 **MIT MUSICAL THEATER GUILD** Cambridge, Massachusetts, USA  
*Member*
- Corresponding Secretary (2013-2019)
  - Costume Shop Manager (2007-2009)
- SHOWS:**
- 9 to 5, 2016: vocal director  
*Spring Awakening*, 2015: pit orchestra (violin and guitar)  
*Legally Blonde*, 2014: co-choreographer  
*Sweeney Todd*, 2014: vocal director, pit orchestra (violin)  
*Reefer Madness*, 2012: choreographer  
*Urinetown*, 2012: Ma Strong, ensemble  
*Hack, Punt, Tool*, 2012: co-writer, choreographer  
*Children of Eden*, 2011: vocal director, Snake  
*Assassins*, 2011: Charles Guiteau, co-props  
*25th Annual Putnam County Spelling Bee*, 2011: vocal director, pit orchestra (violin)  
*Jekyll and Hyde*, 2011: co-director, choreographer  
*Evil Dead*, 2010: Annie, master seamstress  
*Little Shop of Horrors*, 2010: assistant choreographer  
*Side Show*, 2009: choreographer  
*Bare*, 2009: Kyra; program designer, master seamstress  
*The Mystery of Edwin Drood*, 2009: Angela Prysock/Princess Puffer; costume designer  
*Wild Party*, 2008: Kate  
*Pippin*, 2007: Bertha, Manson Trio; co-costume designer  
*Cabaret*, 2007: costume designer  
*Reefer Madness*, 2007: Mae; props designer  
*Children of Eden*, 2006: Eve; costume designer  
*Crazy For You*, 2006: Everett Baker  
*Chicago*, 2006: director  
*Urinetown*, 2006: Hot Blades Harry  
*Star Wars: The Musical*, 2005: Bail Organa, Lobot, ensemble

## EXPERIENCE CONTINUED...

- 2011-2013 **HACK, PUNT, TOOL** Cambridge, Massachusetts, USA  
*Co-writer*
- Co-wrote script and contributed to music to create an original show about hacking culture and life at MIT
  - Collaborated with MIT administration, teachers, and students to create a work that has a significant positive impact on the MIT community
  - Produced by the MIT Musical Theater Guild during IAP 2012
  - Writing and music teams recorded and mastered an original cast recording, released in Sept 2012
  - Released a subtitled video recording of the MIT production on YouTube in Sept 2013
- 2011-2012 **MUSEUM OF SCIENCE** Boston, Massachusetts, USA  
*Education Associate, Current Science & Technology*
- developed, and performed 20-minute presentations on science and technology topics
  - contacted and coordinated guest presenters
  - organized logistics for Museum events
- 2009-2011 **HARVARD MEDICAL SCHOOL, BETH ISRAEL DEACONESS MEDICAL CENTER** Boston, Massachusetts, USA  
*EEG Lab Technician and Research Assistant*
- organized and managed EEG lab, Psychiatry Suite of BIDMC West Campus
  - designed and implemented EEG protocols written in Superlab and Presentation software
  - manage subject recruitment, coordination with clinical assessments, and payment
- 2009-2010 **ROFLCON** Boston, Massachusetts, USA  
*Staff*
- coordinated guest travel/lodging and event volunteers
  - organized event AV logistics
- 2008-2009 **DEPARTMENT OF BRAIN AND COGNITIVE SCIENCES, MIT** Cambridge, Massachusetts, USA  
*Undergraduate Researcher*
- HOW EXPECTATIONS CAN CHANGE PERCEPTION**  
Higher-Level Cognition Lab: Talia Konkle, Steven Piantadosi, Rebecca Saxe
- studied the effect of prior expectations on the perception of incongruent stimuli
  - designed and coded experimental tasks in Matlab; analyzed data in R
- OBSERVING CAUSAL LAWS BY TRACKING EYE MOVEMENTS**  
Early Childhood Cognition Lab: Elizabeth Bonawitz, Laura Schulz
- studied how young children learn to make predictions based on patterns
  - tracked eye movements using Tobii Eyetracker software; analyzed data using Matlab
  - studies were conducted at the Learning Lab at the Children's Museum of Boston
- 2005-2008 **FRESHMEN PRE-ORIENTATION PROGRAMS, MIT** Cambridge, Massachusetts, USA  
*Film Counselor, Freshmen Arts Pre-Orientation (FAP)*
- participated in FAP 2005; film counselor for FAP 2006, 2007, and 2008
  - organized projects and activities for the week-long program
  - co-wrote, filmed, and edited counselor introduction videos and a yearly FAP video
- 2006-2008 **SENIOR HAUS ANNUAL STEER ROAST** Cambridge, Massachusetts, USA  
*Food Veep*
- organized an outdoor feast for approximately 400 people
  - worked with fellow veeps and MIT staff on event registration, logistics, funding, and safety
  - coordinated shopping trips and the borrowed use of an industrial kitchen
  - trained an apprentice and contributed to a Food Veep Bible
- 2007 **EDGERTON CENTER OUTREACH PROGRAM, MIT** Cambridge, Massachusetts, USA  
*Teaching Assistant*
- taught grade-school children topics in science and technology via hands-on classroom projects, including motorized Lego cars, rudimentary circuits, high speed photography, and basic chemistry