

# DanbeeKim

Vigilante International Roustabout Scholar

## contact

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## languages

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

## computer skills

Arduino, Bonsai, Excel,  
Github Pages, Illustrator,  
L<sup>A</sup>T<sub>E</sub>X, Photoshop,  
Premier Pro, Python,  
SketchUp

## fabrication tools

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

## movement arts

capoeira, fire spinning,  
musical theater

## instruments

bass guitar, djembe,  
violin, vocals

## references

available upon request

## education

- since 2013 **Doctor of Philosophy candidate** Champalimaud Center for the Unknown  
*International Neuroscience Doctoral Programme*  
Thesis advisor: Adam Kampff, Intelligent Systems Lab  
Online open lab notebook: [www.danbeekim.org/open-lab-notebook/](http://www.danbeekim.org/open-lab-notebook/)  
Research Interests: open science, perceptual control theory, field neuroscience, humane experimental technique, history and philosophy of science, scientific engagement through performance and storytelling
- 2005–2009 **ScientæBaccalaureus** Massachusetts Institute of Technology  
*Brain and Cognitive Sciences*

## mission

- Modern Education and Field Neuroscience** Inspired by "Green Neuroscience"  
To better feed, educate, and empower future humans by presenting and practicing traditional school curriculum – maths, biology, chemistry, geography, history, physics, and more – in the context of permaculture farming.  
To establish a theory and methodology for field neuroscience, which would complement laboratory neuroscience to verify the ethological validity of behaviour studies and of humane research techniques.

## experience

- since 2017 **Massive Science Consortium** massivesci.com  
*Writer*
- Oct 2017: "Does modern neuroscience really help us understand behavior?"
  - Oct 2017: "How theater, start-up culture, and business history helped us become better neuroscientists"
- since 2016 **Sainsbury Wellcome Centre for Neural Circuits and Behaviour** London, UK  
*Visiting Researcher, Intelligent Systems Lab*
- May 2017, Every Mind Online: collaborative open neuroscience research community dedicated to developing MMOSCs, or Massively Multiplayer Open Science Collaborations.
  - July 2017, "Surprising Minds": project co-lead and exhibit co-host for an interactive exhibit and human psychophysics experiment at the Sea Life Centre in Brighton, UK.
- since 2013 **Champalimaud Center for the Unknown** Lisboa, Portugal  
*PhD Candidate and Researcher, Intelligent Systems Lab*
- Oct 2013, Thesis proposal: *Hunting Behavior: One (Intelligent) System versus Another*
  - Oct 2013, Co-organizer: week-long intensive course on Embodied Cognition.
  - Jan 2014, Teaching Assistant: Intro to Techniques in Neuroscience
  - Feb 2014–Feb 2015, "The Cuttle Shuttle": a collaboration with the Marine Biological Laboratory in Woods Hole, USA, studying hunting behaviour of cuttlefish.
- since 2010 **Appalachian Institute for Creative Learning** Swannanoa, North Carolina  
*Teacher, Staff*
- create and teach summer enrichment camp classes for students aged 8–18 years.
  - past course topics include: Fermentation Fun, Neuroscience, Jigger, Hip Hop.

## experience continued...

- since 2005 **MIT Musical Theater Guild** MIT, Cambridge, Massachusetts  
*Member*
- Corresponding Secretary (2013–2018)
  - 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
- 2015–2017 **Mad Science of Greater Boston** Watertown, MA  
*Teacher*
- teach after-school science classes to pre-kindergarten and elementary school students.
- 2016–2017 **Scratch (Lifelong Kindergarten Group at MIT Media Lab)** Cambridge, MA  
*Community Moderator*
- moderate comments and projects on the online Scratch community.
- 2011–2013 **Hack, Punt, Tool** Cambridge, Massachusetts  
*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  
*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

## experience continued...

- 2009–2011 **Harvard Medical School, Beth Israel Deaconess Medical Center** Boston, Massachusetts  
*EEG Lab Technician, Research Assistant*
- organized and managed EEG lab, Psychiatry Suite of BIDMC West Campus
  - designed and implemented EEG protocols written in Superlab and Presentation software
  - managed subject recruitment, coordination with clinical assessments, and payment
- 2009–2010 **ROFLCon** Boston, Massachusetts  
*Staff*
- coordinated guest travel/lodging and event volunteers
  - organized event AV logistics
- 2008–2009 **Department of Brain and Cognitive Sciences** MIT, Cambridge, Massachusetts  
*Undergraduate Researcher*  
How Expectations Can Change Perception  
Higher-Level Cognition Lab [Talia Konkle, Steven Piantadosi, P.I. 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, P.I. 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  
*Film Counselor for 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** MIT, Cambridge, Massachusetts  
*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
- 2005–2008 **Terrascope** MIT, Cambridge, Massachusetts  
*Undergraduate Teaching Fellow, Kitchen and Snacks Coordinator*  
Terrascope is a year-long freshmen seminar that examines complex real-world problems, presents potential solutions to a visiting board of experts at the end of fall term, then creates a museum exhibit during spring term.
- participated as a freshman in Mission 2009: The Tsunami Threat to the Pacific
  - mentored as an Undergraduate Teaching Fellow in Mission 2011: Saving the Oceans
  - worked within a budget to stock and maintain the Terrascope kitchen
- 2007 **Edgerton Center Outreach Program** MIT, Cambridge, Massachusetts  
*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