# 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, LATEX, 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/

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 ScientæBacculaureus

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, Jugger, Hip Hop.

## experience continued...

#### since 2005 **MIT Musical Theater Guild**

Member

- Corresponding Secretary (2013–2018)
- Costume Shop Manager (2007–2009)

- 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

MIT, 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

## **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