

Katerina Capouskova

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Work

- 2017 **Machine Learning Researcher, Spaceknow Inc.** Prague, Czech Republic
Dr. Michal Reinstein Research Team
Deep learning in Keras, Tensorflow, and Tflern on satellite imagery to detect various features, data analysis, trading indexes predictions based on satellite imagery
- 2016 **Data Analyst/Expert Advisor, eVision Optik, s.r.o.** Prague, Czech Republic
Translated Czech-English: ophthalmology, presentations, data analysis, and advisory in vision impairment through neuroscientific framework
- 2016 **Volunteer, Czechitas** Prague, Czech Republic
Instructing children (age 7-17) to build algorithms in KODU environment developed by Microsoft, workshops and summer camp

Laboratory Experience

- 2020 **Head of Laboratory, GenDet Laboratory, COVID-19 section** Prague, Czech Republic
Weekend and night shift lead of SARS-CoV-2 testing team performing real-time PCR. People leadership, communications with other lab departments (administration, sampling points, IT), material orders, shifts assignments, communication with Government entities (Public Health Department, Army, and municipalities). Also led a custom IS/IT implementation responsible for a whole PCR test workflow, including automated communication back to citizens
- 2017 **PhD Thesis Research, UPF** Barcelona, Spain
Prof. Gustavo Deco's Computational Neuroscience Group
Funding: HBP SGA3 Human Brain Project Specific Grant Agreement 3 (grant agreement no. 945539), funded by the EU H2020 FET Flagship programme
EEG and fMRI data analysis, computational modelling, Python computational graph building
- 2015 **Research Assistant, Na Homolce Hospital** Prague, Czech Republic
Laboratory of Molecular Diagnostics
DNA processed and analysed by PCR, LightScanner, Agarose gel, DNA quantification by spectrophotometry, SPSS, Excel
- 2014 **MSc. Research Project, King's College London** London, UK
Dr. Geoff Bird's Social Neuroscience Laboratory
Participants recruitment, consent and screening providing, tDCS stimulation, data analysis using SPSS, basic MatLab and E-prime control

Education: Degree Granting

- 2017 **Universitat Pompeu Fabra, Computational Neuroscience Group** Barcelona, Spain

- Ph.D.: Computational Neuroscience**
Thesis Title: *Temporal and spatial patterns differences of basal brain states and cognitive brain states.*
- 2014 **King's College London, Institute of Psychiatry** London, UK
Master of Science: Neuroscience (with Merit)
Module: Psychiatric Genetics, Project: *The Role of the Right Temporoparietal Junction in Social Cognition: A Transcranial Direct Current Stimulation Study.*
- 2013 **The London School of Economics and Political Science** London, UK
Master of Science: Philosophy of Science
Dissertation title *'How Do We Understand the Behaviour of Others?' Simulation Considered from the Perspective of Self-consciousness as a Theoretical Cognitive Discipline'* with focus on social cognition in the overall dynamic embodied cognition theory.
- 2012 **Masaryk University in Brno** Brno, Czech Republic
Bachelor of Arts: Journalism, Media Studies and Gender Studies
Dissertation title *Body and Embodiment in the work of Frida Kahlo analysed through gender theory of Iris Marion Young* with focus on bodily self-image of women.
- 2007 **Gymnazium Jana Keplera** Prague, Czech Republic
High School Diploma: General

Education: Non-Degree

- 2019 **CNeuro: International Summer School and Workshop in** Beijing, China
Theoretical and Computational Neuroscience at Tsinghua University
- 2019 **Ibro-Simons Computational Neuroscience Imbizo Summer Sch.** Cape Town, South Africa
- 2016 **General Assembly Data Science Immersive Course** San Francisco, CA, USA
SQL, Git, UNIX, Python and Data Analysis, Machine Learning, Visualization, R
- 2016 **Model-based Neuroscience Summer School** Amsterdam, NL
- 2015 **Computational Neuroscience by Uni of Washington Coursera** Prague, Czech Republic
- 2012 **Charles University in Prague** Prague, Czech Republic
Non-degree 180ECTS: Aesthetics
Specialization in cognitive function of aesthetic experience with focus on the impact on self-representation.
- 2010 **Copenhagen University** Copenhagen, Denmark
Erasmus Exchange Programme: Philosophy and Cognitive Science
Module specialization in embodied and embedded cognition and philosophy of mind.
- 2010 **Harvard Extension School** Cambridge, MA, USA
Summer School: Philosophy, Psychology
Courses in philosophy of mind and introduction to psychology.
- 2005 **Harvard Extension School** Cambridge, MA, USA
Secondary School Summer Program: Principles of Economics

Conferences

Capouskova K., Kringelbach M., Deco G. (2019, June). *Spatiotemporal characteristics of functional connectivity brain states in rest and cognitive tasks*. Poster session presented at the European Neuroscience Conference by Doctoral Students (FENS), Francis Crick Institute, London, UK.

Capouskova K. (2013, April). *Can the situated cognitive loop hypothesis be supported by the notion of self-consciousness?*. Response talk presented at the King's College London Graduate Conference in Philosophy of Mind and Psychology, London, UK.

Publications

1. Capouskova, K., Kringelbach, M.L. & Deco, G. Modes of cognition: Evidence from metastable brain dynamics. *Neuroimage* **260**, 119489 (2022). doi: 10.1016/J.NEUROIMAGE.2022.119489
2. Vila-Vidal, M., Capouskova, K., Atasoy, S., Kringelbach, M. L. & Deco, G. Uncovering the spatiotemporal scales of common neuro-mental constructs. *Phys. Life Rev.* (2019). doi:10.1016/j.plrev.2019.10.004

Programming Courses

February 2016: ‚I am making a web‘ – 1 day HTML/CSS workkshop, Czechitas, Prague, CZ

April 2016: ‚Introduction to C#‘ - 1 day workshop, Czechitas, Hradec Kralove, CZ

April – June 2016: ‚Python Course‘ – 3 months course, PyLadies, Prague, CZ

April 2016: ‚Data Girls‘ – 1 day workshop, Czechitas, Prague, CZ (Power BI, Tableau, Good Data)

Other Qualifications

Boat Skipper 2007, Tennis trainer 2005, Tennis referee level B 2005, Driving license 2005, Open Water Diver 2003

Extra-Curricular Activities

- Member of the Cognitive Science Society since 2013
- Tate gallery member since 2013
- Member and co-organizer: LSE Czech and Slovak Society & University of London Society (2012-2013)
- Chief Organizer of annual ‚Symposion‘ conference at GJK (2006, 2007)
- First place winner (twice) with designs implemented for Graduation Ball invitation at Gymnazium Jana Kepler (2005, 2007)
- Part of Broader National Czech Ski Team (2002-2004), FIS Federation
- Yoga lover, Arendt worshipper, and beer adorer

Languages

Czech Native, English Proficient, German Intermediate, Spanish Intermediate, Danish Elementary

Google Scholar https://scholar.google.com/citations?user=aFG8E_AjMZ4C&hl=en