

Mark Antony Gorenstein

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Research Interests

Cognitive neuroscience, neuromodulation, cortical oscillations, predictive coding

Education

2016 COLUMBIA UNIVERSITY, New York, NY
B.A. in Computer Science
3.7 GPA, Philosophy concentration within major

2014–2015 ST. CATHERINE’S COLLEGE, Oxford, UK
Computer Science–Philosophy
Selective year-long exchange program

Experience

July 2016– EPILEPSY & COGNITION LAB, Lebanon, NH
Research Assistant
Restoring Active Memory Project
PIs: Barbara Jobst (Dartmouth)
 & Michael Kahana (University of Pennsylvania)

2014–2015 LAB FOR THE PHILOSOPHY & PSYCHOLOGY OF RATIONALITY & DECISION, Oxford, UK
Research Assistant
PI: Philipp Koralus

Summer 2015 YOSSARIAN, London, UK
NLP Research & Development

2013–2014 OPEN SYLLABUS PROJECT, New York, NY
Research Assistant

Publications

[ACCEPTED] Ezzyat Y, Wanda PA, Levy D, Kadel A, Aka A, Pedisich I, Sperling MR, Sharan AD, Lega BC, Burks A, Gross RE, Inman CS, Jobst BC, **Gorenstein MA**, Davis KA, Worrell GA, Kucewicz MT, Stein JM, Gorniak R, Das SR, Rizzuto DS, Kahana MJ, “Closed-loop stimulation of temporal cortex rescues functional networks and improves memory,” *Nature Communications*.

[SUBMITTED] Meisenhelter S, Testorf ME, **Gorenstein MA**, Hasulak N, Tcheng T, Aronson JP, Jobst BC, “Cognitive Tasks and Human Ambulatory ElectroCorticography using the NeuroPace RNS,” *Submitted*.

Conference Presentations

- 2017 **Gorenstein MA**, Jobst BC, et al., “Modulating interictal spiking through targeted electrical stimulation during a word list memory task,” *American Neurological Association*, San Diego, CA, USA. **Voted top abstract in category, awarded travel funding.**
- Gorenstein MA**, Jobst BC, et al., “Evaluating the effects of targeted electrical stimulation on interictal spiking across stimulation sites and parameters,” *Society for Neuroscience*, Washington, D.C., USA
- Song Y, **Gorenstein MA***, Hartstein KC, Tse PU, Roberts DW, Hong J, Bujarski KA, Kobylarz EJ, Thadani VM, Thomas GP, Jobst BC, “A GUI-based platform for human brain functional mapping in epilepsy patients,” *Society for Neuroscience*, Washington, D.C., USA
(* presenting author)
- Gorenstein MA**, Jobst BC, et al., “Assessing the Cognitive Impact of Morphologically Distinct Interictal Spikes,” *American Epilepsy Society*, Washington, D.C., USA

Talks

- Oct. 2017 “Modulating interictal spiking through targeted electrical stimulation during a word list memory task,” *American Neurological Association*, Advances in Electrical Stimulation for Treatment of Epilepsy & Comorbidities Symposium, San Diego, CA, USA.

Teaching & Mentorship

- 2016– NEW HAMPSHIRE ACADEMY OF SCIENCE
Mentor of submissions to the annual meeting of the American Junior Academy of Science
- 2012-2013 AMERICA READS (P.S. 76 AND P.S. 180)
Volunteer literacy tutoring three days per week in Harlem

Workshops

- Nov. 2017 ANIMAL CONSCIOUSNESS WORKSHOP, NYU, New York, NY
- Aug. 2017 ACTION UNDERSTANDING SUMMER WORKSHOP, Hanover, NH
- Apr. 2017 DARTMOUTH NEUROSCIENCE DAY, Hanover, NH
- Oct. 2016 CENTER FOR COGNITIVE NEUROSCIENCE RETREAT, Fairlee, VT
- Aug. 2016 PREDICTIVE CODING SUMMER WORKSHOP, Hanover, NH

Awards

- \$1,000 travel award to American Neurological Association meeting
- Dean’s List (all but one semester)

Skills

COMPUTATIONAL METHODS

High dimensional data analysis: NumPy, pandas, scikit-learn, etc.

Experiment presentation: jsPsych, PsychoPy, Amazon MTurk

Data visualization: matplotlib, D3.js, Processing

Tools: L^AT_EX, Git/GitHub

PROGRAMMING LANGUAGES

Python, C/C++, Java, MATLAB, JavaScript, HTML, CSS, SQL

NATURAL LANGUAGES

Russian (Heritage Speaker)

French (Elementary Proficiency)

References

BARBARA C. JOBST
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Director of Epilepsy Center
Vice Chair of Neurology
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MARKUS E. TESTORF
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