Julia Berezutskaya

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Employment

2020/02 – present	Postdoctoral researcher Artificial Intelligence department, Radboud University, Nijmegen, the Netherlands *- Supervised by prof. Marcel van Gerven* *- Guest researcher at University Medical Center Utrecht, Brain Center, Utrecht, the Netherlands*
2015/03 – 2020/01	PhD candidate University Medical Center Utrecht, Brain Center, Utrecht, the Netherlands *- Supervised by prof. Nick Ramsey*

Education

2012/09 – 2014/09	MSc in Cognitive Neuroscience Center for Mind/Brain Sciences, University Of Trento, Italy *- Exchange program (one-year) at Computational Cognitive Neuroscience lab, Radboud University, Nijmegen, The Netherlands* *- Thesis supervised by dr. Marcel van Gerven, dr. Irina Simanova* *- Cum laude graduation honors*
2007/09 – 2012/06	Specialist's Degree in Computational Linguistics (BSc + MSc) Lomonosov Moscow State University, Russia *- Cum laude graduation honors*

Publications

2022	**Berezutskaya, J.,** Vansteensel, M. J., Aarnoutse, E. J., Freudenburg, Z. V., Piantoni, G., Branco, M. P., & Ramsey, N. F. (2022). Open multimodal iEEG-fMRI dataset from naturalistic stimulation with a short audiovisual film. // *Scientific data (in press).*
2021	**Berezutskaya, J.,** Vansteensel, M. J., Aarnoutse, E. J., Freudenburg, Z. V., Piantoni, G., Branco, M. P., & Ramsey, N. F. (2021). Open multimodal iEEG-fMRI dataset from naturalistic stimulation with a short audiovisual film. // *BioRxiv.*
2021	Vansteensel, M. J., Selten, I. S., Charbonnier, L., **Berezutskaya, J.,** Raemaekers, M. A., Ramsey, N. F., & Wijnen, F. (2021). Reduced brain activation during spoken language processing in children with developmental language disorder and children with

	22q11. 2 deletion syndrome. // *Neuropsychologia, 107907.*
2020	**Berezutskaya, J.,** Baratin, C., Freudenburg, Z. V., & Ramsey, N. F. (2020). High-density intracranial recordings reveal a distinct site in anterior dorsal precentral cortex that tracks perceived speech. // *Human brain mapping, 41(16), 4587-4609.*
2020	**Berezutskaya, J.,** Freudenburg, Z. V., Ambrogioni, L., Güçlü, U., van Gerven, M. A., & Ramsey, N. F. (2020). Cortical network responses map onto data-driven features that capture visual semantics of movie fragments. // *Scientific reports, 10(1), 1-21.*
2020	**Berezutskaya, J.,** Freudenburg, Z. V., Güçlü, U., van Gerven, M. A., & Ramsey, N. F. (2020). Brain-optimized extraction of complex sound features that drive continuous auditory perception. // *PLoS computational biology*, *16(7), e1007992*.
2019	Ambrogioni, L., Güçlü, U., **Berezutskaya, J.**, Borne, E., Güçlütürk, Y., Hinne, M., ... & Gerven, M. (2019, April). Forward amortized inference for likelihood-free variational marginalization.// *The 22nd International Conference on Artificial Intelligence and Statistics (pp. 777-786). PMLR.*
2017	**Berezutskaya, J.**, Freudenburg, Z. V., Güçlü, U., van Gerven, M.A.J., Ramsey, N. F. (2017). Neural tuning to low-level features of speech throughout the perisylvian cortex // *Journal of Neuroscience, 37(33), p. 7906.*
2017	**Berezutskaya, J.**, Freudenburg, Z. V., Ramsey, N. F., Güçlü, U., van Gerven, M.A.J. (2017) Modeling brain responses to perceived speech with LSTM networks. // *Benelearn 2017: Proceedings of the Twenty-Sixth Benelux Conference on Machine Learning, p. 149.*
2017	Ambrogioni, L., **Berezutskaya, J.**, Güçlü, U., van den Borne, E. W., Güçlütürk, Y., van Gerven, M.A.J., & Maris, E. G. G. (2017). Bayesian model ensembling using meta-trained recurrent neural networks // *Workshop on Meta-Learning at Neural Information Processing Systems, p. 1*.
2012	Pechenkova E., Vlasova R., **Berezutskaya J.**, Sinitsyn V. (2012) One-back task functional localizer for visual word form area reveals inverse pattern of activation in readers of Russian // *Journal of Vision. Vol. 12, n. 9, p. 531.*

Awards & Grants

2021	Trainee Professional Development Award, Society for Neuroscience (SFN), USA
2020	Student Assistant Funding, Donders center, Radboud University, Netherlands
2019	Travel Grant to attend the SFN meeting, Federation of European Neuroscience Societies (FENS)
2019	Travel Fund to attend the SFN meeting, UMC Utrecht, Netherlands [declined]
2018	Travel Award to attend the BCI Society meeting, BCI Society, USA
2018	Scholarship to attend Computational Neuroscience course, isiCNI Cape Town, South Africa [declined]
2017	Scholarship to attend Computational and Cognitive Neuroscience summer school, NYU Shanghai, China/USA
2015	Premio di Merito, University of Trento, Italy
2014	Erasmus Placement 'Place your Talent' Scholarship, University of Trento, Italy
2013	Erasmus Consortium Placement Scholarship, University of Trento, Italy
2013	Scholarship Bilateral Agreement University of Trento – Barnard College, Columbia University, Italy [declined]
2012	Erasmus Study Scholarship, University of Trento, Italy

2012	Opera Universitaria Scholarship to cover Master's degree tuition fees, Italy
2007	Presidential Scholarship to cover 5 years of Specialist's degree tuition fees, Russia

Professional Service

2021 – present	Review editor at the Frontiers journal Brain-Computer Interfaces
2020 – present	Reviewing for Current Biology, Frontiers in Human Neuroscience, Frontiers in Systems Neuroscience, Journal of Neural Engineering

Academic Leadership

2022 – present	Member of Young Academy UMC Utrecht
2022 – present	Postdoc representative on the Trainee/Postdoc committee of the BCI society
2021 – present	Member of the Young NeurolabNL research network
2020 – present	Member of the European consortium on Neurotechnology "INTENSE"
2020 – present	Coordinating postdoc in a work package of the Dutch consortium "Language in Interaction"

Organization of Workshops & Seminars

2021	Invited talks for the work package of the Language in Interaction consortium
2017	Session moderation at the Donders Discussions conference
2017	Two-day BCI research seminar: Freiburg University – UMC Utrecht

Mentorship & Supervision

2022	Supervision: Evan Kemmer (Bachelor's internship, UMC Utrecht)
2021	Supervision: Zuzanna Dedyk (Master student assistant & lab rotation, Radboud University)
2021	Grading theses: Fleur Brandsen, Floris Van Wettum, Joost Kasper, Leonie Wagner (Bachelor's internships, Radboud University), Freek van den Bergh (Master's thesis, Radboud University)
2020	Supervision: Julie Clar (Bachelor's literature review, UMC Utrecht)
2020	Supervision: Paolo Favero (Master's research internship, UMC Utrecht)
2019	Supervision: Feng Lin (Master's literature thesis, UMC Utrecht)
2019	Supervision: Anastasia Nosanova (Bachelor's internship, UMC Utrecht)
2018	Supervision: Jeroen Dijkmans (Master's literature thesis, UMC Utrecht)
2018	Supervision: Clarissa Baratin (Master's research internship, UMC Utrecht)
2017	Supervision: Danielle Bruel (Master's research internship, UMC Utrecht)
2017	Supervision: Zoe Cox-Putker (Master's research internship, UMC Utrecht)

Teaching

2021.09.28	Keynote on speech decoding for BCI *at the course on Current Issues in clinical neuroscience* (UMC Utrecht, the Netherlands)

2019.03.18	Tutorial: Python, Pandas and Seaborn *at the Language in Interaction PhD meeting,* (Radboud University, the Netherlands)
2018.05.21	Fundamentals of machine learning applied to BCI research *at Fundamental didactic session of BCI Society meeting* (Asilomar, USA)
2017.05.12	Deep learning for neuroscience *at a mini-course on machine learning, Brain Center Rudolf Magnus* (UMC Utrecht, the Netherlands)
2017 – 2019	MATLAB course *in Master's Neuroscience and Cognition program* (Utrecht University, the Netherlands)

Invited Talks

2022.02.24	Speech decoding from intracranial data *at the Neurolinguistics seminar of High School of Economics* (Moscow, Russia)
2022.02.11	Explainable AI: how to make sense of black-box artificial neural network models at *X–talk on Translational Neuroscience* (UMC Utrecht, the Netherlands)
2021.11.09	Decoding naturalistic speech from iEEG with artificial neural networks *at the symposium "Speech Decoding from Intracranial Data" of the Society for Neuroscience online meeting*
2021.10.14	Speech-to-brain mapping with deep learning models *at the U-BRAIN meeting* (UMC Utrecht, the Netherlands)
2021.06.08	Towards naturalistic speech decoding from the brain *at the workshop "From Speech Decoding to Speech Neuroprostheses" of the BCI Society online meeting*
2017.06.26	Modeling continuous ECoG responses to naturalistic speech using recurrent neural networks *at Human Brain Mapping* (Vancouver, Canada)

Selected Conference Presentations

2021	**Berezutskaya J.**, Vansteensel M.J., Aarnoutse E.J., Freudenburg Z.V., Piantoni G., Branco M.P., Ramsey N.F. Open iEEG-fMRI dataset from naturalistic stimulation with a short audiovisual film *at BCI Society meeting* (online)
2021	**Berezutskaya J.,** Ambrogioni L., Ramsey N.F., van Gerven M.A.J. Towards naturalistic speech decoding from brain data *at ICLR workshop "How Can Findings About The Brain Improve AI Systems?"* (online)
2019	**Berezutskaya J.**, Baratin C., Freudenburg Z.V., Ramsey N.F. High-density intracranial recordings reveal evidence of speech tracking in dorsal premotor cortex at *Society for Neuroscience* (Chicago, USA)
2018	**Berezutskaya J.**, Freudenburg Z.V., Aarnoutse E.J., Vansteensel M.J., Leinders S., Pels E., Ramsey N.F. Using a convolutional neural network for improved click detection in an implanted BCI setup at *BCI Society meeting* (Asilomar, USA)
2017	**Berezutskaya J.**, Freudenburg Z.V., Ramsey N. Decoding individual phonemes from ECoG neural responses using convolutional neural networks *at Society for Neuroscience* (Washington DC, USA)
2016	**Berezutskaya J.**, Freudenburg Z.V., Güçlü, U., van Gerven M.A.J., Ramsey N.F. Neural tuning to low-level features of speech in the brain *at Society for Neuroscience* (San Diego, USA)
2016	Cox-Putker Z., **Berezutskaya J.**, Ramsey N.F. Understanding encoding of complex visual

	features in a continuous feature film *at Mind the Brain Symposium* (Utrecht, the Netherlands)
2016	Bruel D., **Berezutskaya J.**, Ramsey N.F. Encoding of perceived speech intensity in the brain using fast fMRI *at Mind the Brain Symposium* (Utrecht, the Netherlands)
2015	**Berezutskaya J.**, Freudenburg Z.V., Ramsey N.F., Güçlü, U., van Gerven M.A.J. Low-level encoding of continuous speech in high-gamma neural responses *at Donders Discussions* (Nijmegen, the Netherlands)
2012	Litvinova L.D., Pechenkova E.V., Vlasova R.M., **Berezutskaya J.**, Sitinsin V.E. Localization of speech perception using three experimental paradigms (fMRI evidence from Russian) *at International Symposium on Functional Neuroimaging: Basic Research and clinical Applications* (Moscow, Russia)
2011	**Berezutskaya J.**, Pechenkova E.V. Localization of semantic and syntactic processing using functional magnetic resonance imaging (evidence from Russian) at *Neuro- and Psycholinguistic Approaches to Language Processing* (Braga, Portugal)