DR NIKA ADAMIAN

Postdoctoral Research Fellow

University of Aberdeen School of Psychology

EMPLOYMENT

Postdoctoral Research Fellow (2017 — March 2020)

Project: A quantitative framework of attentional selection (supervisor: Dr. Søren Andersen)

We are developing a quantitative model of visual attention that directly links electrophysiological measures of stimulus processing in visual cortex with behavioural outcomes. To this end we are using drift diffusion modeling, measurements of steady-state visual evoked potentials (SSVEPs) and event-related potentials (ERPs).

EDUCATION

Université Paris Descartes, Doctoral school "Cognitions, Comportements & Conduites Humaines" 2014-2017

PhD in Cognitive Neuroscience

Supervisor: Prof. Patrick Cavanagh

Thesis title: Predictive position coding: attentional account of motion-induced position shifts

University of Oxford, Department of Experimental Psychology, 2012-2013

MSc in Psychological Research

Supervisor: Prof. Mark Stokes

Thesis title: "The Role of Alpha-band Oscillations in Preparatory Attention"

Saint Petersburg State University, Department of Psychology, 2008-2012

BA in Psychology (with distinction)

Supervisor: Dr. Maria Kuvaldina

Thesis title: "The Role of Expectation in Inattentional Blindness"

PUBLICATIONS

- **Adamian, N.,** Hillyard, SA., Andersen, SK. (2019) Parallel attentional facilitation of features and objects in early visual cortex. *Psychophysiology*
- Coffey, K., **Adamian, N.**, Blom, T., van Heusden, E., Cavanagh, P., Hogendoorn, H. (2019) "Expecting the unexpected: Temporal expectation increases the flash-grab effect" *Journal of Vision* 2019;19(13):9
- Seizova-Cajic T., **Adamian, N.,** Duyck, M., Cavanagh, P. (2019). Motion-induced scotoma. *Perception*, 48(2), 115-137.
- **Adamian, N.,** Slaustaite, E., Andersen, SK. (2019) Top-down attention is limited within but not between feature dimensions. *Journal of Cognitive Neuroscience*, 31(8), 1173-1183
- **Adamian, N.,** Cavanagh, P. (2017) Fröhlich effect and delays of visual attention. *Journal of Vision 2017;17(1):* 3. doi: 10.1167/17.1.3
- Noonan, M. P., **Adamian, N.,** Pike, A., Printzlau, F., Crittenden, B. M., Stokes, M. G. (2016) Distinct mechanisms for distractor suppression and target facilitation. *Journal of Neuroscience* 36(6), p. 1797 1807
- **Adamyan N.,** Kuvaldina M. (2014) Be Prepared: The Effect of Expectations on Inattentional Blindness. *The Russian Journal of Cognitive Science 1.3 (2014): 4-12.*

TEACHING EXPERIENCE

University of Aberdeen, School of Psychology (2018-2019)

- <u>Advanced Research Methods for Postgraduates</u>: Data Visualisation module Role: development and delivery of the module (lecture, corresponding workshops, assessment worksheets), development of multiple-choice exam questions.
- Methodology (Level 3 undergraduate course)
 Role: supervision of small groups of students carrying out a 10-week research project.
 Responsibilities: development and implementation of a study, supervision of data collection and analysis, assessment of oral presentations and written research reports.
- <u>Undergraduate thesis co-supervision</u> (01/2018-05/2018)
 Dissertation project "Neural mechanisms of attention modulation across set sizes during multiple object tracking"
- <u>Summer project supervision</u> (06/2018-08/2018)
 Project "Sustained effects of conflict monitoring on feature-based visual attention"

CONFERENCE PROCEEDINGS

- Andersen, SK., **Adamian, N.,** Lemarchand, R. (2019) Attentional facilitation of tracked targets limits multiple object tracking performance. [Abstract] *Perception*
- **Adamian, N.,** Andersen, SK. (2019) Comparing the effects of feature-based attention on SSVEPs and behaviour [Abstract] *Perception*
- **Adamian, N.,** Andersen, SK. (2019) SSVEP correlates of feature-based attention: a drift-diffusion study [Abstract] *i-Perception*
- **Adamian, N.,** Slaustaite, E., Andersen, SK. (2017) Feature-based selection is unaffected by dividing spatial attention. [Abstract] *Perception*
- Cavanagh, P., **Adamian, N.,** Duyck, M., Seizova-Cajic, T (2016) Perceptual gap closing induced by motion context. [Abstract] *Perception*
- Adamian, N., & Cavanagh, P. (2016) Motion induced distortion of shapes. [Abstract] Perception
- **Adamian, N.,** & Cavanagh, P. (2016) Localization of flash grab targets is improved with sustained spatial attention. [Abstract] Journal of vision
- **Adamian, N.,** & Cavanagh, P. (2015). Motion-induced position shifts smaller across the vertical and horizontal meridians. [Abstract] Perception 44, p.238
- **Adamian, N.,** & Cavanagh, P. (2015). Speed of visual attention and localization of motion onset. [Abstract] *Journal of vision*, *15*(12), 1178-1178.
- **Adamyan N.,** Kuvaldina M. (2012) Task congruency in inattentional blindness. [Abstract] *Perception 41, p. 142* Kuvaldina M., **Adamyan N.** (2012) Is the relevance of the critical object Irrelevant for the Inattentional Blindness? [Abstract] Perception 41, p.146

RESEARCH SKILLS

Visual psychophysics EEG/ERP/SSVEP Eye tracking Programming in MATLAB (advanced)
Programming in R (intermediate)
Model-based data analysis

AWARDS

Travel award for participation in the workshop "Advanced Methods for Reproducible Science", 2019

Discovering Research Award prize (summer internship supervision)

Travel award for participation in the Summer School "Perceptual organization: Interdisciplinary approaches and research skills", University of Leuven, 2014

Humphrey Prize for the best Research Project on the MSc Psychological Research 2012-2013

Hill Foundation Scholarship for studying at the University of Oxford (2012-2013)

Departmental Fellowship - Saint Petersburg State University, 2012

University Award for high-achieving students – Saint Petersburg State University, 2011

Departmental Fellowship - Saint Petersburg State University, 2011

V. Potanin Fund Scholarship for Excellence and Leadership, 2009/10

OTHER PROJECTS

EEG ManyLabs (contributor)

Assessing the credibility of results of some of the most important and influential experiments in the field through a global network of labs

Think Cognitive Think Science (co-founder)

Non-governmental support fund for Russian students studying cognitive science. We provide grants, organise summer schools and workshops.

Open Science MOOC (localisation coordinator)

MOOC is designed to help equip students and researchers with the skills they need to excel in a modern research environment.