



Economic
and Social
Research Council



Using individual differences to investigate the socially relevant components of time perception

ESRC DTP Strategic Joint Studentship

University of Leicester and University of Nottingham

The Midlands Graduate School is an accredited Economic and Social Research Council (ESRC) Doctoral Training Partnership (DTP). One of 15 such partnerships in the UK, the Midlands Graduate School is a collaboration between the Universities of Warwick, Birmingham, Nottingham, Aston, Leicester, Loughborough, De Montfort and Nottingham Trent.

We are now inviting applications for an ESRC Strategic Joint Studentship between the School of Psychology and Vision Sciences, University of Leicester (where the student will be registered) and the School of Psychology, University of Nottingham to commence in October 2025.

Understanding cues from gaze is fundamental to communicating and interacting in a social environment. Perceiving where someone is looking and, more importantly, whether they are looking directly at us provides us with an insight into someone's intentions. While the role of gaze direction has been extensively studied, the importance of gaze timing has only recently become apparent. The duration of brief gaze exchanges is central to many social interactions. For instance, imagine catching someone's eye at a party. Subtle differences in the duration of eye contact could signal mutual interest or a quite different social meaning (e.g., threat). While people are adept at making these distinctions, the mechanisms underlying the perception of brief time intervals remain largely unknown. This project will use individual differences to study time perception and its specific role in social interactions. Traditional approaches treat variations in time perception between individuals as noise, a nuisance factor that is largely ignored. However, it is becoming increasingly clear that patterns of individual differences can be a rich source of information about psychological processes. Recent studies taking a factor analytic approach to analysing patterns of covariance across measures have provided new insight into a range of perceptual and cognitive domains, including spatial acuity, colour preference and face recognition. Research questions will fall into three broad categories:

1. Is social time perception supported by unitary or multi-channel brain mechanisms?
2. Are intervals containing socially relevant information (like, for instance, gaze shifts) processed by the same mechanisms as socially neutral intervals?
3. How are variations in social time perception shaped by individual traits?

To address these questions, the project will employ an innovative combination of (i) online and lab-based data collection, (ii) pupillometry, and (iii) advanced multivariate analysis combined with

computational modelling. The project will be jointly supervised by Dr Aurelio Bruno (University of Leicester) and Professor Neil Roach (University of Nottingham).

Application Process

To be considered for this PhD, please complete the strategic Joint Studentship application form [available online here](#). Please upload an anonymised CV and cover letter as part of the online application process. Shortlisted applicants will also be required to provide transcripts and two references.

Application deadline: 24th February 2025 (Interviews will be held in the week starting on 3rd March 2025)

Midlands Graduate School ESRC DTP

Our ESRC studentships cover fees at the home rate, a maintenance stipend, and extensive support for research training, as well as research activity support grants. Support is available to both home and international applicants. For further details, visit: www.mgsdtp.ac.uk/studentships/eligibility/.

Informal enquiries prior to application can be directed to Dr Aurelio Bruno (aurelio.bruno@leicester.ac.uk).