

# **Job Description**

# Postdoctoral Research Associate in Computer/Cognitive Science

#### **Position Overview**

Discipline	Computer Science
Faculty	Computing, Mathematics, Engineering and Natural Sciences (CoMENS)
Location	London, Devon House (St Katherines Dock)
	Hybrid Option available, to be discussed during the interview
Term	Three Years (Full-time; Fixed term)
Salary Range	£40,847 per annum
Direct Reports	Research Assistant in Psychology
Reports to	Dimitris Mylonas
Benefits	The university supports staff maintaining a good work/life balance, offer flexible working and parental leave opportunities, an Employee Assistance Programme which provides free, confidential advice on both home and work concerns as well as optional private medical insurance, season ticket loans and being part of the cycle to work scheme.
Start	September 2024

### The Role

Northeastern University London invites applications for a *Post-doctoral Research Associate (PDRA) in Computer/Cognitive Science*. The successful candidate will work on **augmenting colour communication under diverse viewing conditions and across different languages**, a research area that impacts multiple disciplines and has a lot of practical applications.

The successful candidate will join the "Cones-to-Words" research team at the Northeastern University London campus near St Katharine's Dock, led by Dr Dimitris Mylonas (Principal Investigator, NU London). They will join a multidisciplinary team of experts in machine learning and colour vision, including Dr Alexandros Koliousis (NU London), Professor Rhea T. Eskew (NU Boston), and Professor Andrew Stockman (UCL), as well as with technical support staff. The candidate will co-supervise a part-time Research Assistant in Psychology, as well as interact with graduate and PhD students. Preference may be given to candidates with active interests in the relationship of computer and/or cognitive science to one or more of the following areas: colour science, machine learning, computer vision and applied engineering.

Postdoctoral Research Associate in Computer/Cognitive Science Job Description

Core duties include: (i) designing crowdsourcing, laboratory and Virtual Reality (VR) experiments; (ii) analysing data; and, (iii) implementing and evaluating machine learning models to help people talk about colour worldwide, building on our ongoing colour naming experiment at <u>colornaming.net</u>. The PDRA will also be involved in collaborative team efforts to address fundamental challenges in colour vision, specifically aiming to map the physiological processing of cone photoreceptors to the linguistic categorisation of colours onto a series of mechanistic stages. The PDRA is expected to be the first author on at least two conference or journal papers related to the project's goals, highlighting both their contributions and those of other team members.

We particularly encourage applications from those belonging to groups underrepresented in UK higher education. We are open to appointing on a reduced fraction/job-share basis subject to our business needs.

## About the Faculty

The recently formed Faculty of Computing, Mathematics, Engineering, and Natural Sciences (CoMENS) is undergoing significant growth at Northeastern University London. It is home to four interdisciplinary undergraduate dual-degree (in UK and US) programmes in the areas of Data Science, Data Science and Politics, Computer Science and Business, and Computer Science and Philosophy; four postgraduate programs in the areas of AI Ethics, Data Science, Computer Science, and Technology Leadership; and five degree apprenticeship programmes in the areas of AI, Data Science, Digital and Technology Solutions, and Biosciences.

The Faculty plays a major part in Northeastern University's first-year student mobility program, offering undergraduate courses in Computer and Data Science, Mathematics, Engineering, Physics, Biology, Chemistry and Healthcare, striving to inspire and equip entering students to be outstanding scientists.

## About the University

Founded in 2012, Northeastern University London (formerly known as New College of the Humanities) has established itself as a prestigious higher education institution based in the heart of London. Northeastern University London is part of Northeastern University's Global Campus Network. Positioned as top ranking in the USA, Northeastern has campuses in Arlington, Boston, Charlotte, Miami, Oakland, San Jose, and Seattle in the USA, and Toronto and Vancouver in Canada.

After becoming part of Northeastern University's global network in early 2019, the University has undergone a period of rapid growth, having been granted Taught Degree Awarding Powers in February 2020 and moved to a new, state-of-the-art campus in 2021.

Northeastern University London offers a vibrant, collegiate community delivering broad and academically rigorous degree programmes, designed to equip graduates with the combination of skills and knowledge that are increasingly desired by organisations, employers, and society. It offers state of the art audio visual technology in its teaching and meeting spaces across the organisation.

#### **Person Specification Criteria**

To undertake this role, the following should apply – should you not have the experience below, please do highlight where transferable skills would assist with you undertaking the role.

#### Qualifications

• PhD, or equivalent professional experience, in Computer Science, Cognitive Science, Human Colour Vision, Computational Neuroscience, Computer Vision or related quantitative field.

#### Key Criteria

- Knowledge of computational models of human colour vision
- Strong programming skills in Python and/or Matlab; knowledge of Web languages is an advantage
- Demonstrated ability to plan, execute, and publish research
- Excellent written and verbal interpersonal communication skills
- Excellent time-management and organisational skills

#### Additional Information

#### Enquiries

Informal enquiries may be made to Dr Dimitris Mylonas, Primary Investigator of the Cones-to-Words project (dimitris.mylonas@nulondon.ac.uk). However, all applications must be made in accordance with the application process specified.

### **Application Process**

Applications should be made via <u>this link</u> by 23:59 on **21 May 2024.** Please reference your application "**PRACS0524**". Participation in the equal opportunities section is encouraged, but voluntary.

Applications must include a CV and covering letter of no more than one page that addresses the criteria for the role and includes names and contact information of up to three references. References will only be sought for short-listed candidates.

Postdoctoral Research Associate in Computer/Cognitive Science Job Description

Interviews are expected to take place between June 1 and June 15, 2024.

Please note this role may require a basic or enhanced DBS check. Our organisation acknowledges the duty of care to safeguard, protect and promote the welfare of our students and staff, and is committed to ensuring safeguarding practice reflects statutory responsibilities, government guidance and complies with best practice and Ofsted requirements. You must adhere to the above if you are offered a role with NU London.

Applications are welcome from all sections of the community and will be judged on merit alone. We welcome applications from underrepresented groups. Candidates must be able to demonstrate their eligibility to work in the UK in accordance with the Immigration, Asylum and Nationality Act 2006.

*Job sponsorship.* Visa sponsorship may be available for a successful candidate for this position.