Fermín Travi

Research Interests

Themes | Neuroscience-inspired artificial intelligence, language representation, visual behaviour

Methods | MRI, eye-tracking, machine learning, data acquisition and analysis

Applications | Cognitive modeling, natural language processing, computer vision

Education

April 2022 – Ongoing | **PhD student in Computer Science**

Title: "Artificial semantic abstractions based on eye movements during online reading experiments" Applied Artificial Intelligence Lab, School of Exact and Natural Sciences, University of Buenos Aires

March 2022 | Licenciatura en Ciencias de la Computación (Bachelor's degree + MSc in Computer Science)

School of Exact and Natural Sciences, University of Buenos Aires

8.63 average (historical average to date: 8.19)

Research and Work Experience

Autumn 2022 | Research Intern

Project: Efficient and scalable mobile AR application for tool detection

R&D department, Marposs S.p.A., Italy

July 2021 – March 2022 | Research Intern

Project: Human visual search in natural scenes computational models

Laboratorio de Inteligencia Artificial Aplicada, Facultad de Ciencias Exactas y Naturales, Universidad

de Buenos Aires, Argentina

2014 - 2015 | **Software Developer**

PSA Peugeot Citröen, Argentina

Conference and Journal Publications

1. **Travi, F.**, Ruarte, G., Bujia, G. & Kamienkowski, J. E. *ViSioNS: Visual Search in Natural Scenes Benchmark* in *Thirty-sixth Conference on Neural Information Processing Systems (NeurIPS)* (2022). Earlier version at NeurIPS'21 Workshop on Shared Visual Representations in Human and Machine Intelligence.

Refereed Workshops Contributions

2. **Travi, F.**, Ruarte, G., Bujia, G. & Kamienkowski, J. E. Benchmarking human visual search computational models in natural scenes: models comparison and reference datasets in Shared Visual Representations in Human and Machine Intelligence 2021 Workshop at NeurIPS (2021).

Talks and Posters

2023

3. **Travi, F.** et al. Neural correlates of cognitive impairment phenotypes following a COVID-19 infection in Annual Congress of the Argentine Society of Neurosciences (to be presented).

2021

4. **Travi, F.**, Ruarte, G., Bujia, G. & Kamienkowski, J. E. Benchmarking human visual search computational models in natural scenes: models comparison and reference datasets in Annual Congress of the Argentine Society of Neurosciences (2021). (Virtual Oral Presentation).

Teaching Experience

2023 | Algorithms and Data Structures II

Teaching Assistant

Department of Computer Science, School of Exact and Natural Sciences, University of Buenos Aires

1Q 2022 | Algorithms and Data Structures I

Teaching Assistant

Department of Computer Science, School of Exact and Natural Sciences, University of Buenos Aires

2Q 2021 | Algebra (Workshop in Functional Programming)

Teaching Assistant

Department of Computer Science, School of Exact and Natural Sciences, University of Buenos Aires

Reviewer Experience

2022

NeurIPS 2022 Track on Datasets and Benchmarks

Two articles on the main topic of autonomous driving and visual reasoning were reviewed.

Awards

April 2022 – April 2027

PhD scholarship

National Council on Scientific and Technical Research (CONICET)

Courses

• NMA-Deep Learning 2021. Neuromatch Academy. Three-week full-time international online summer school course on Deep Learning.

Languages

- International English Language Testing System (IELTS). Score: 8.0
- Certificate of Proficiency in English (CPE). Grade: B. ESOL Examinations, University of Cambridge.