# 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

Departamento de Computación, Facultad de Ciencias Exactas y Naturales, Universidad de Buenos Aires

1Q 2022 | Algorithms and Data Structures I

Teaching Assistant

Departamento de Computación, Facultad de Ciencias Exactas y Naturales, Universidad de Buenos Aires

2Q 2021 | Algebra (Workshop in Functional Programming)

Teaching Assistant

Departamento de Computación, Facultad de Ciencias Exactas y Naturales, Universidad de 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

Consejo Nacional de Investigaciones Científicas y Técnicas (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.