

# Research Activities

**Faculty of Engineering of Porto University**  
**Department of Informatics Engineering**  
**João Correia Lopes**

---

I've worked in [INESC Porto](#), [DCS Glasgow](#), [FEUP](#) / [INESCTEC](#).

[Search Results for Projects \[FEUP\]](#)

[Search Results for Projects \[INESC TEC\]](#)

## Projects

- **ILIAD** — A data-intensive, cost-effective Digital Twin of the Ocean (H2020-EU.3.2-SOCIETAL CHALLENGES, 101037643, February 2022 - ongoing)
- **EUROCC** — National Competence Centres in the framework of EuroHPC (H2020-JTI-EuroHPC-2019-2, GA951732, September 2020 - ongoing)
- **EPOSSP** — European Plate Observing System Sustainability Phase (H2020-INFRADEV-2018-2020, 871121, February 2020 - ongoing)
- **iReceptor+** — Architecture and tools for the query of antibody and T-Cell receptor sequencing data repositories for enabling improved personalized medicine an immunotherapy (H2020-SC1-2018-Single-Stage-RTD, 825821, January 2019 - ongoing)
- **EUCAN-CONNECT** — A federated FAIR platform enabling large-scale analysis of high-value cohort data connecting Europe and Canada in personalized health (H2020-SC1-2018-Single-Stage-RTD, 824989, 1st January 2019 - 31st December 2023)
- **C4G** — Colaboratório para as Geociências (FEEI/FCT-01/SAICT/2016/22151, 15th June 2017—11th June 2021)
- **MELOA** — Multi-purpose/Multi-sensor Extra Light Oceanography Apparatus (H2020-SC5-2016-2017-RIA, 776825, December 2017 - February 2022)
- **e-WindLidar** — Making lidar data FAIR, (IRPWIND WP3 — Lidar Data Modelling and Architecting Web Platform, Grant agreement nº 609795, July 2017 - January 2018)
- **windscanner.pt** — Infraestrutura Nacional WindScanner (NORTE-01-0145-FEDER-022207 (PINFRA/22207/2016), 23rd October 2017 - 20th October 2021)
- **RECAP preterm** — REsearch on Children and Adults born Preterm (H2020-SC1-2016-RTD, 733280, January 2017 - September 2021)
- **TAIL** — Research data management from creation to deposit and sharing (PTDC/EEI-ESS/1672/2014, POCI-01-0145-FEDER-016736, 30th May 2016 - 30th November 2019)
- **iCare4Depression** — I Care for Depression: Blending face-to-face psychotherapy with internet and mobile digital solutions (PTDC/MHC-PCL/1991/2014, POCI-01-0145-FEDER-016840, 1st June 2016 - 29th February 2020)
- **NEWA** — New European Wind Atlas Joint Programme (ERA-NET Plus, topic FP7-ENERGY.2013.10.1.2, NEWA/0001/2014, 1st March 2015 - 28th February 2020)
- **E-COMPARED** — European-COMPARative Effectiveness research on online Depression (FP7-HEALTH.2013-INNOVATION-1, 603098, 1st January 2014 - 30th June 2016)
- **WindScanner.eu** — The European WindScanner Facility (FP7-INFRASTRUCTURES, 312372, 2012 - 2015)
- **TICE.Mobilidade** — Sistema de mobilidade centrado no utilizador (SI IDT—13843/2011, 2011 - 2014)
- **EcoPlanner** — Plataforma de gestão ecoeficiente (SI IDT—13085/2011, 2011 - 2013)
- **MOBILES** — MOBILidade Eléctrica Sustentada (SI IDT—5730/2009, 2009 - 2011)
- **ICT4Depression** — User-friendly ICT Tools to Enhance Self-Management and Effective Treatment of Depression in the EU (FP7—248778, 2010 - 2012)
- **ROBOTVIGIL** — Robot Vigilante (SI IDT—7905/2010, 2010 - 2011)
- **ILP-Web-Service** — Um serviço web baseado num sistema de indução de programas de lógica

(PTDC/EIA/70841/2006, 2008 – 2010)

- [DBPreserve](#) — Data Warehouses for the Long-term Preservation of Institutional Electronic Records and Databases (PTDC/CCI/73166/2006, 1st October 2007 – 31st December 2009)
- [MEDSI](#) — Management Decision Support for Critical Infrastructures (IST—506991, 2005 – 2006)

## INESC Porto

Since 19th June 1985, I'm doing research at [Instituto de Engenharia de Sistemas e Computadores](#) (INESC Porto) in Information Systems, Databases and Software Engineering. At the moment I'm a researcher of [Information and Computer Graphic Systems](#) (USIG).

## Computing Science Department, University of Glasgow

From October 1991 to January 1995, I was doing research in Persistent Programming, in the FIDE project, [University of Glasgow](#), [Department of Computing Science](#), working in my PhD in the [Persistence and Distribution Group](#).

## PhD Thesis

My PhD degree in Computing Science was awarded in June 1997 by University of Glasgow.

**Title:** An Architecture for the compilation of Persistent Polymorphic Reflective Higher-order Languages

**Supervisor:** [Malcolm Atkinson](#)

**Thesis:** My thesis is that an intermediate representation designed to enable high level optimisations and easy code generation can effectively support persistent reflective higher-order polymorphic languages in the context of Scalable Persistent Foundations, namely that it supports longevity, safety and persistence. This was demonstrated by presenting an initial design of such a compilation system and identifying and validating its crucial features by prototyping.

You may have a look at the [Abstract](#), or [Bibliography](#) (41kB, [\\_ps.gz](#)).

— *J. Correia Lopes*

From:

<https://web.fe.up.pt/~jlopes/> - JCL

Permanent link:

<https://web.fe.up.pt/~jlopes/doku.php/rd?rev=1667557117>

Last update: **04/11/2022 10:18**

