

Ana Correia de Barros

Address Avenida Fernão de Magalhães, 1175, 2.º Esq
4350-169 Porto, Portugal
Telephone +351 936 445 860
E-mail anacorreiadebarros@gmail.com
Birth date 07 December 1982
Portfolio correiatedebarros.com

Work experience

2018 - **Head of Human-Centred Design**
Fraunhofer Portugal AICOS, Porto

Fraunhofer Portugal AICOS is a non-profit centre doing applied research on digital technology, mainly for the domains of healthcare and manufacturing. Here I enhanced my skills in design ethnography, in-depth interviews, thematic analysis, focus groups, participatory design sessions, prototyping, designing interactions, usability testing and expert evaluation. The position includes managing a team, doing project management, writing research bids and interfacing with industry clients for contract research.

I have also served as elected President of the Scientific Board.

Work examples: https://www.aicos.fraunhofer.pt/en/scientific_expertise/human-centred-design.html

2018 - 2019 **Invited lecturer, courses: Project methodology and management & Evaluation and Tests (Post-graduate studies in Interaction Design, Web and Games)**
Faculty of Fine Arts, Porto

2016 - 2017 **Manager of research, development and innovation**
CRPG, Gaia Vocational Rehabilitation Centre, Vila Nova de Gaia

CRPG is a centre providing rehabilitation services to clients with acquired disabilities (e.g., stroke, brain injury, cancer, accidents). The R&D unit was built to support evidence-based interventions and to help design innovative services for clients.

2016 - 2017 **Invited lecturer, course: User studies (Master in Interaction Design)**
IADE University, Lisbon

2012 - 2016 **Senior researcher**
Fraunhofer Portugal AICOS, Human-Computer Interaction group, Porto

2012 **Invited lecturer, course: Design III (Product design)**
IADE University, Lisbon

2009 - 2012 **Design researcher**
UNIDCOM (Research Unit in Design and Communication, IADE), Lisbon

Integrated as a PhD researcher, I had the opportunity to work with other researchers in design, with the surrounding community and I wrote my first proposals for research projects.

2009 - 2011 **Invited designer and facilitator of Inclusive Design workshops for graduating design students**
Faculty of Architecture and Arts, Lusíada University, Porto

During my PhD I became interested in techniques to elicit empathy as tools to promote inclusive design and awareness about different disabilities. I applied the knowledge in intensive workshops with industrial design students, which consisted of analysing a real world problem and delivering a working prototype of an assistive product in the end.

- 2010 – 2011 **Invited lecturer, course: Drawing (Product design)**
Viana do Castelo Polytechnic (IPVC), Viana do Castelo
- 2008 **Production designer in the short film *El Justiciero***
Direction: Tiago Sousa. Production: *ZED Filmes*, Coimbra
- This was an intensive experience which taught me how to work in a large team of people I did not know before while under pressure to fulfil all the tasks in time.*
- 2007 – 2008 **Industrial designer**
Induse, Industrial design, Vila Nova de Famalicão
- Working in this company has provided me with experience in facing clients and also in accompanying production on site. I had the chance to work on product and interior design, going from conception to production and implementation.*
- 2007 **Invited lecturer, course: Digital technologies**
University of Trás-os-Montes e Alto Douro (UTAD), Vila Real
- 2006 – 2007 **Freelancer: layout design, image treatment and branding**
- 2004 – 2005 **Design collaborator**
Design company *Boxtype*, Maia
- 2002 **CAD designer**
Company *Zicati*, Maia

Education

- 2014 **Attended Master of Linguistics**
Faculty of Arts, University of Porto
- 2012 **PhD in Industrial Engineering and Management**
UBI (University of Beira Interior) – UNDCOM/IADE
Full scholarship
- Thesis title: “Assistive products – Engineering, design and development”. In my doctoral work I conducted research about assistive products for stroke survivors. I engaged in ethnographic research by visiting stroke survivors in different parts of the country and I used the findings to then build the research around courses of action to tackle causes of scarce assistive product use: lack of information, suitability, cost and psychosocial reasons.*
- Grade: 19/20 (with highest honours)*
- 2006 **Licentiate degree in Industrial Design**
Faculty of Architecture and Arts, Lusíada University, Porto
- Study subjects: CAD/Digital technologies, Anthropology, History of art, Materials and technologies, History of design, Drawing, Aesthetics, Phenomenology, Industrial production, Craft skills, Rapid prototyping, Social psychology.*
- Grade: 16/20 (5-year plan prior to the Bologna Process)*

Additional training

- 2021 **Training the Trainers Virt2UE Course**
Course on Responsible Research and Innovation at i3S, Institute for Research and Innovation in Health
- 2018; 2019 **Handweaving (Introduction and intermediate levels)**
With Fernando Rei and Guida Fonseca at Saber Fazer, Porto
- 2015 **Introduction to Systematic Review and Meta-analysis**
Faculty of Psychology, University of Porto

- 2014 **Advanced Ethnography**
University of Nottingham
- 2013 **Third cycle postgraduate seminar STTF2013 ‘Sustainable technologies and transdisciplinary futures: from collaborative design to digital fabrication’**
ISCTE – University Institute of Lisbon
- 2002 – 2003 **Autodesk Studio Viz 4 course**
Instituto Ciência e Letras
- 2002 **AutoCAD 3D course**
Instituto Ciência e Letras
- 1997 **Drawing course**
National Museum *Soares dos Reis* (MNSR)

Involvement in research projects

- International **Anathema:** Technology for ageless sexual health (aal-2020-7-133) | Project EU coordinator and Principal Researcher.
- LIFANA:** Lifelong food and nutrition assistance package (aal-2017-13) | Project manager.
- Sport+4All:** Active and Included (Erasmus+) | Project manager and researcher.
- Cordon Gris:** Making sense of data to promote effortless healthy eating habits and autonomy for older adults (aal-2015-1-016) | Project EU coordinator and researcher. [[link](#)]
- My-AHA:** My active and healthy ageing (H2020-PHC-21-2015 689592) | Researcher. [[link](#)]
- MASPARK:** Freezing of gait in Parkinson’s disease: improving quality of life through an automatic control system (Fundació La Marató) | Project manager and researcher.
- Clockwork:** Smart system for the management and control of shift workers’ circadian rhythms (aal-2013-6-055) | Project EU coordinator and researcher.
- ChefMyself:** Assistance solution for improving cooking skills and nutritional knowledge for independent elders (aal-2012-5-120) | Project manager and researcher [[link](#)]
- REMPARK:** Personal health device for the remote and autonomous management of Parkinson’s Disease (FP7-ICT-2011-7-287677) | Researcher [[link](#)]
- National **SINATRA:** Smart industrial maintenance through augmented reality (ANI-PT2020) | Researcher
- Operator:** Digital Transformation in Industry with a Focus on the Operator 4.0 (MIT International Partnerships) | Researcher and project manager
- STVgoDigital:** Digitalização da cadeira de valor do setor têxtil e vestuário. Developing a textile exoskeleton for operators in the textile industry (ANI-PT2020) | Researcher
- Symbiotic technology for societal efficiency gains:** Project involving important research centres in the north of the country to collectively address the topics of mind & behaviour, nutrition, health monitoring, physical activity, agriculture and social inclusion through shared intelligence and modular/reusable technology | Project leader.
- S4S:** Smartphones for Seniors. Promoted by Microsoft Portugal. QREN, UE/FEDER – COMPETE – Programa Operacional Factores de Competitividade | Project manager and Researcher [[link](#)]

Awards / Distinctions / Individual grants

- 2019 **Best Paper Award.** At the UbiComp workshop on Longitudinal Data Collection.
- 2017 **Kyoto, Japan.** Selected to participate in the *Kyoto Design Lab Textiles Summer School*, Japan, starting from the work of traditional weavers to design new products.
- 2017 **Dresden, Germany.** Scholarship by TU Dresden do participate in ‘smart@work: Dresden international spring school on human technology cooperation’, Germany.
- 2016 **Dresden, Germany.** Full scholarship awarded by Goethe-Institut for German language study in Dresden.
- 2015 EU research project ChefMyself finalist in the Innova eVIA awards.
- 2015 EU research project ChefMyself finalist in the Active Assisted Living Awards.
- 2013 Finalist of the **GSMA mWomen Design Challenge** (promoted by GSMA mWomen, Qtel Group, USAID and Australian AID) with the project “Aziza”. Team: HCI group from Fraunhofer AICOS.
- 2011 Winner of the **24h Inclusive Design Challenge**, coordinated by Julia Cassim (Royal College of Art) and promoted by the DesignStudio (Oporto’s Faculty of Engineering – FEUP) with the project “Pátio”. Team members: Anselmo Canha, Mário Barros, José Silvestre, João Moço and Sílvio Nogueira.
- 2008 **Full PhD scholarship** granted by the Portuguese Foundation for Science and Technology (FCT).
- 2007 Winner of the contest to design the trophy for *Challenge Desafio Único*, included in the *Grande Prémio Histórico do Porto 2007*.
- 2007 Laud attributed by Oporto’s Lusíada University for second best student in the Industrial Design programme.
- 2006 Honourable mention to project “meSa”, in the category of Social Solidarity of the contest *Protege o que é bom*, promoted by *Tetra Pak*.

Other activities

- 2017 – **External project evaluator for the AAL Association, Marie Skłodowska-Curie and COST Actions**
Evaluating projects on inclusive design and human-centred design of digital technology
- 2017 – **Member of the direction**
SUPERA – Portuguese society of rehabilitation engineering, assistive technology and accessibility

Languages

Portuguese

Mother tongue

English

C2. Proficient
Cambridge Certificate of Proficiency in English. Grade A

German

C1. Good at oral level and writing,
good reading comprehension

Portuguese Sign Language

A1. Beginner

Spanish

C2. Very good at oral and written levels

French

A2. Reasonable at oral level and written comprehension

Japanese

N4. Beginner

List of publications

Papers in journals

- 2022 Correia de Barros, A. (accepted). Inclusive Design within Industry 4.0: A Literature Review with an Exploration of the Concept of Complexity. *The Design Journal*.
- 2021 Cradock KA, Quinlan LR, Finucane FM, Gainforth HL, Martin Ginis KA, Correia de Barros A, Sanders EB-N, ÓLaighin G. (2021) Identifying Barriers and Facilitators to Diet and Physical Activity Behaviour Change in Type 2 Diabetes Using a Design Probe Methodology. *Journal of Personalized Medicine*, 11(2):72. [\[link\]](#)
- 2018 Bayés, A., Samá, A., Prats, A., Perez, C., Crespo-Maraver, M., Moreno, J.M., Alcaine, S., Rodriguez-Molinero, A., Mestre, B., Quispe, P., Costa, A., Annicchiarico, R., Browne, P., Counihan, T., Lewy, H., Vainstein, G., Azuri, J., Quinlan, L.R., Sweeney, D., ÓLaighin, G., Rovira, J., Rodriguez-Martin, D., Castro, R., Correia de Barros, A., and Cabestany, J. (2018). A "holter" for Parkinson's Disease: Validation of the ability to detect on-off states using the REMPARK system. *Gait & Posture*, 59:1-6. [\[link\]](#)
- 2016 Nunes, F., Silva, P. A., Cevada, J., Correia de Barros, A., Teixeira, L. (2016). User interface design guidelines for smartphone applications for people with Parkinson's Disease. *Universal Access in the Information Society*, 16(2). [\[link\]](#)
- 2012 Correia de Barros, A. (2012). The wider picture in [inclusive] design. *Zoontechnica*, Issue 2. [\[link\]](#)
- 2011 Correia de Barros, A., Duarte, C., Cruz, J. B. The influence of context on product judgement – Presenting assistive products as consumer goods. *International Journal of Design*, 5(3), 99-112. [\[link\]](#)
- 2009 Correia de Barros, A., Duarte, C., Cruz, J. B. (2009). Designers and stroke research. *Australasian Medical Journal*, 1(10):36-43. [\[link\]](#)

Book chapters

- 2022 Araújo, R., Vasconcelos, A., Correia de Barros (in press). A case study of remote user research with older adults during lockdown: Analysis of barriers, strategies and of communication issues. In *Perspectives on Design and Digital Communication III: Research, Innovations and Best Practices*, Nuno Martins, Daniel Brandão & Francisco Paiva (eds.). Springer.
- 2022 Kiernan L., Correia de Barros A., Cotrim T., Chamberlain P. (2022) The Future of Design for Health and Wellbeing. In: Duarte E., Rosa C. (eds) *Developments in Design Research and Practice*. Senses 2019. Springer Series in Design and Innovation, vol 17. Springer, Cham. https://doi.org/10.1007/978-3-030-86596-2_15
- 2017 Correia de Barros, A., Cevada, J., Graça, R. (2017). User interaction. *Parkinson's Disease Management through ICT: The REMPARK Approach*. Joan Cabestany, Àngels Bayés (eds.). E-book. DOI: doi: 10.13052/rp-9788793519459 [\[link\]](#)
- 2017 Correia de Barros, A., Vasconcelos, A. (2017). SmartCompanion to GoLivePhone. *Designing user interfaces for an aging population: Towards universal design*. Jeff Johnson, Kate Finn (eds.), pp. 187-192. Cambridge: Morgan Kaufman. [\[link\]](#)
- 2016 Correia de Barros, A., Vasconcelos, A. (2016). Human-centred design with older adults: Examples and recommendations for research, ideation and testing. *Active and Assisted Living: Technologies and Applications*. F. Flórez-Revuelta, Alexandros Andre Chaaraoui (eds.), pp. 409-431. IET. [\[link\]](#)

Reports

- 2017 Correia de Barros, A. (2017). *Survey on ICT use amongst CRPG's clients: Insights and opportunities for service design*. CRPG, Vila Nova de Gaia, Portugal.

- 2017 Correia de Barros, A. (2017) *Acidentes de trabalho e doenças profissionais em Portugal*. CRPG, Vila Nova de Gaia, Portugal. [Title in English: *Occupational Accidents and Diseases in Portugal*. Portuguese only]

Papers in conferences

- 2022 Correia de Barros, A., Correia, C., Moutinho, R., Lemos, G., Resende, C., Cunha, L., Silva, D., Maggioli, S., Amorim, S.B. (in press). Design and Evaluation of a Device for Ecological Momentary Assessment with Workers in a Garment Factory. In *Proceedings of AHFE 2022*.
- 2022 Cunha, L., Silva, D., Maggioli, S., Correia De Barros, A., Correia, C., Ricaldoni, F., Amorim Brito, S. (2022). Pleasure and Suffering at Work in the Technical Act: A Case Study From a Garment Factory in a Context of Technological Transformation. In *Proceedings of the 5th International Conference on Intelligent Human Systems Integration: Integrating People and Intelligent Systems (IHSI 2022)*.
- 2021 Correia de Barros, A., Correia, C., Ricaldoni, F. (2021). A gesture elicitation study to generate interaction design insights for self-reporting of mental and body states using a portable device. In: Shin C.S., Di Bucchianico G., Fukuda S., Ghim YG., Montagna G., Carvalho C. (eds) *Advances in Industrial Design. AHFE 2021. Lecture Notes in Networks and Systems*, vol 260. Springer, Cham.
- 2019 Vasconcelos, A., Lopes, I., Ribeiro, J. & Correia de Barros, A. (2019). Challenges and lessons learned from implementing longitudinal studies for self-care technology assessment. In *Adjunct Proceedings of the 2019 ACM International Joint Conference on Pervasive and Ubiquitous Computing and Proceedings of the 2019 ACM International Symposium on Wearable Computers (UbiComp/ISWC '19 Adjunct)*. ACM, New York, NY, USA, 893-898. [[link](#)]
- 2017 Ribeiro, D., Machado, J., Ribeiro, J., Vasconcelos, M. J. M., Vieira, E., Correia de Barros, A. (2017). SousChef: Mobile meal recommender system for older adults. In *Proceedings of the 3rd International Conference on Information and Communication Technologies for Ageing Well and e-Health - Volume 1: ICT4AWE*, 36-45. [[link](#)]
- 2015 Guimarães, V., Castro, R., Correia de Barros, A., Cevada, J., Bayés, A., García, S., Mestre, B. (2015). Development of an auditory cueing system to assist gait in patients with Parkinson's disease. *Bioinformatics and Biomedical Engineering, Lecture Notes in Computer Science*, Vol 9044, 2015, pp 93-104. [[link](#)]
- 2014 Correia de Barros, A., Rêgo, S., Antunes, J. (2014). Aspects of human-centred design in HCI with older adults: Experiences from the field. In *Human-Centered Software Engineering, Lecture Notes in Computer Science*, Vol 8742, pp. 235-242. [[link](#)]
- 2014 Ribeiro, J., Correia de Barros, A. (2014). Efficiency of a video and a tutorial in teaching older adults to interact with smartphones. In *Universal Access in Human-Computer Interaction. Aging and Assistive Environments. Lecture Notes in Computer Science*, Volume 8515, May 2014, pp. 34-45. [[link](#)]
- 2014 Correia de Barros, A., Leitão, R., Ribeiro, J. (2014). Design and evaluation of a mobile user interface for older adults: navigation, interaction and visual design recommendations. *Procedia Computer Science*, 27, *5th International Conference on Software Development and Technologies for Enhancing Accessibility and Fighting Info-exclusion, DSAI 2013*, pp. 369-378 [[link](#)]
- 2014 Correia de Barros, A., Cevada, J., Bayés, A., Alcaine, S., Mestre, B. (2014). Design and evaluation of a medication application for people with Parkinson's disease. In G. Memmi and U. Blanke (Eds.): *MobiCASE 2013*, LNICST 130, pp. 273-276. [[link](#)]
- 2013 Schaefer, K., Ribeiro, D., Correia de Barros, A. (2013). Beyond heat maps: mining common swipe gestures. In *Proceedings of the 12th International Conference on*

- Mobile and Ubiquitous Multimedia* (MUM '13). ACM, New York, NY, USA, Article 3, 4 pages. DOI=10.1145/2541831.2541842. [[link](#)]
- 2013 Correia de Barros, A., Cevada, J., Bayés, A., Alcaine, S., Mestre, B. (2013). User-centred design of a mobile self-management solution for Parkinson's disease. In *Proceedings of the 12th International Conference on Mobile and Ubiquitous Multimedia* (MUM '13). ACM, New York, NY, USA, Article 23, 10 pages. DOI=10.1145/2541831.2541839. [[link](#)]
- 2013 Correia de Barros, A., Leitão, R. (2013). Young practitioners' challenges, experience and strategies in usability testing with older adults. In Encarnação, P., Azevedo, L., Gelderblom, G. J. and Mathiassen, N-E (eds.) *Assistive Technology: From Research to Practice – AAATE 2013*, pp. 787-792. Amsterdam: IOS Press. [[link](#)]
- 2012 Correia de Barros, A., Duarte, C. (2012). 'Dear user...' – Empathy building methods for assistive product design. *Proceedings of the 8th International Conference on Design & Emotion*. London, UK.
- 2011 Correia de Barros, A., Duarte, C., Cruz, J. B. (2011). Design, body, pain and evil. *Proceedings of the 6th CIPED*. CIAUD and ANPE Design, Lisbon, Portugal.
- 2011 Correia de Barros, A., Duarte, C., Cruz, J. B. (2011). Complexity in inclusive design: Needs or opportunities? *Proceedings of the Senses & Sensibility Conference*: 538-550. UNIDCOM/IADE, Lisbon, Portugal.
- 2011 Correia de Barros, A., Duarte, C., Cruz, J. B. (2011). Crossing data: Where do users' preferences come from? *Proceedings of the Include 2011 Conference*. London, UK. [[link](#)]
- 2011 Correia de Barros, A., Duarte, C., Cruz, J. B. (2011). Designing objects or systems? The role of design in assistive products' delivery. *Proceedings of the Include 2011 Conference*. London, UK. [[link](#)]
- 2011 Correia de Barros, A., Duarte, C., Cruz, J. B. (2011). First sketches for a history of daily living aids. *Proceedings of the Include 2011 Conference*. London, UK. [[link](#)]
- 2011 Correia de Barros, A., Duarte, C., Cruz, J. B. (2011). Fear as a design brief. *Proceedings of the Include 2011 Conference*. London, UK. [[link](#)]
- 2010 Correia de Barros, A., Duarte, C., Cruz, J. B. (2010). Spontaneous inventions: Do-It-Yourself assistive devices to improve independence. *Proceedings of the 3rd International Conference for Universal Design*. Hamamatsu, Japan.
- 2010 Correia de Barros, A., Duarte, C., Cruz, J. B. (2010). 'I made it myself' – DIY in the design of assistive devices for stroke patients. *Proceedings of the 7th International Conference on Design & Emotion*. Chicago, USA.
- 2009 Correia de Barros, A., Duarte, C., Cruz, J. B. (2009). Independence and inclusion – Guiding principles for assistive products' design. *Proceedings of e-design Conference*. Portuguese Design Centre, Lisbon, Portugal.
- 2009 Correia de Barros, A., Duarte, C. (2009). Assistive devices – Stroke patients' design. *Proceedings of ACM 7th Creativity and Cognition Conference*: 79-86. Berkeley, USA. [[link](#)]
- 2009 Correia de Barros, A., Duarte, C., Cruz, J. B. (2009). "I'm afraid of..." – Implications for the design of assistive devices. *Proceedings of 5th CIPED Conference*. San Paulo, Brazil, UNESP.
- 2009 Correia de Barros, A., Duarte, C., Cruz, J. B. (2009). Stroke Seen by designers. *Proceedings of 40IADE40 Conference*: 319-327. UNIDCOM/IADE, Lisbon, Portugal.