

Francisco Nunes

Born: December 20, 1987—Porto, Portugal

Nationality: Portuguese & Brazilian

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Research interests

I am interested in learning about people and how they use technology. My projects are usually at the intersection of computer science, medicine, design, and social sciences. I am an expert in ethnographically informed design, user-centred design, and participatory design approaches.

Broad keywords for my work would be: Human-Computer Interaction, Computer-Supported Cooperative Work, Health Informatics, and Science and Technology Studies.

Education

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| 2012-2017 | PhD in Informatics (Human-Computer Interaction), TU Wien
<i>Thesis: "The Everyday Life with Parkinson's and Self-care Technologies"</i> |
| 2005-2010 | MSc & BSc in Informatics and Computing Engineering, University of Porto
<i>Thesis: "Healthcare TV Based User Interfaces for Older Adults"</i> |

Experience

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| 2017-now | Senior researcher, Fraunhofer Portugal AICOS, Porto |
| 2016-2017 | Researcher, NOVA-LINCS, Universidade Nova de Lisboa, Lisboa |
| 2012-2017 | PhD Student, Institute for Design and Assessment of Technology, TU Wien, Vienna |
| 2008-2012 | Researcher, Fraunhofer Portugal AICOS, Porto |

Grants, honours & awards

ACQUIRED PROJECT GRANTS

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|------|--|
| 2019 | €117K - "Demonstration of EyeFundusScope with Non-Expert Ophthalmology users" funded by ANI (PT) – <i>Lead proposal writer and PI.</i> |
| 2011 | €137K - "Smartphones for Smart Seniors (S4S)" funded by ANI (PT) – <i>Lead proposal writer.</i> |

- 2011 €411k - “Personal Health Device for the Remote and Autonomous Management of Parkinson’s Disease (REMPARK)” funded by FP7-ICT (EU) – *Co-proposal writer*.
 * €76K - Industry contracted research e.g., Alcatel-Lucent, ALMASCIENCE, Doist.

OTHER GRANTS AND HONOURS

- 2016 Two special recognitions for an ‘Excellent Review’ at CHI 2016
 2012 Vienna PhD School of Informatics scholarship (3 years of funding)
 2012 Dance! Don’t Fall was on the Top-25 Apps, CES Mobile Apps Showdown
 2011 Smart Companion was 2nd most creative app, ZON Creativity Award (prize: €6250)
 2010 Mover was 5th best Lifestyle app, Android Developer Challenge II (prize: equipment)

Teaching & supervision experience

COURSES

- 2019-2020 Learning from Users: User Research Methods for Technology Design (MSc, PhD @AICOS)
 2019 Design Project Management and Methodology (Post-graduate @U. Porto)
 2016-2018 Qualitative methods and co-design of self-care technologies (MSc @U. of Copenhagen) –
Invited lecture on self-care and self-care technologies
 2015 HCI in Healthcare (MSc @TU Wien) – *Co-teaching and project supervision*
 2014 User Research Methods (MSc @TU Wien)– *Co-teaching and project supervision*

SUPERVISED STUDENTS

- ongoing Niloufar Chakmaghi, MSc Media Informatics @TU Wien
 2019 João Simões, MSc Biomedical Engineering @Universidade Nova de Lisboa
 2018 Cristiana Braga, MSc Service Design @FEUP
 2018 João Almeida, MSc Informatics Engineering @FEUP
 2015 Martin Herndl, BSc Medical Informatics @TU Wien
 2012 João Cevada, MSc Informatics Engineering @FEUP
 * Other 8 students as unofficial MSc co-supervisor

SUPERVISED PhD INTERNSHIPS

- 2019 Cristina Mendes Santos, PhD Internet Interventions @Linköping University
 2018 Martina Čaić, PhD Service Design @Maastricht University

Projects

ONGOING

- 2019-2021 *EyeFundusScopeNEO* (PT2020) – This project is piloting EyeFundusScope, a solution to screen diabetic retinopathy, in CUF Infante Santo. I am PI at AICOS.

SELECTION OF PREVIOUS PROJECTS

- 2014-2019 *Clockwork* (EU AAL-JP) – This project developed technologies to support the self-care of shift workers. I was in charge of supervising the user research, design, and evaluation of the smartphone app and the smart badge, the tasks of AICOS. I also coordinated the project consortium for 24 months. <http://clockworkproject.eu/>
- 2016-2019 *Physio@Home* (PT2020) – This project is developing a solution to support physical rehabilitation for the home and clinic, using wearables and serious games. I am involved in the design and evaluation of the system; I also replaced the PI of the project for 14 months.
- 2010-2012 *Smart Companion* (Internal) – This project created an Android skin specifically designed for older people. I participated in the user research, design, and evaluation of the smartphone applications. Smart Companion is today being sold by GOCIETY under the name GOLIVEPHONE. <http://smartcompanion.projects.fraunhofer.pt>
- 2009-2012 *eCAALYX* (EU AAL-JP) – This project created a telehealth system for older adults with chronic conditions. I participated in the the user research, design, and evaluation of the TV interfaces for older adults. <http://ecaalyx.org>

Service

PROGRAM COMMITTEE MEMBER

CHI 2020, 2019

CSCW 2018

PervasiveHealth 2015, 2016

Mindcare 2016

And in workshops at CHI '20, ICEC'18, CHI'16, GROUP '14, Ubicomp '13, SouthCHI '13

WORKSHOP ORGANIZER

- 2020 Dis-entangling later life: ageing processes, innovative practices & critical reflections? at STS Italia '20
- 2019 Who Cares? Exploring the Concept of Care Networks for Designing Healthcare Technologies at ECSCW '19 ([link](#))
- 2014 Designing Self-care for Everyday Life at NordiCHI '14 ([link](#))
- 2014 Designing Systems for Health and Entertainment: what are we missing? at ACE '14 ([link](#))

REVIEWER

ENTCOM, Health Informatics Journal, IJCCI, IJHCS, IxD&A, JAMIA, JCSCW, JMIR, TOCHI. CHI ('19, '18, '17, '16, '15, '14), CSCW ('18, '17, '16, '15), DIS '18, Group '16, Healthcom '13, Interact '19, MobileHCI '17, NordiCHI ('16, '14), PervasiveHealth ('17, '16, '15).

STUDENT VOLUNTEER

CHI ('16, '13), CSCW '15 PC meeting, NordiCHI '10

Publications & talks

h-index: 13; citations: 495 (source Google Scholar as at 03/2020)

PROCEEDINGS AND SPECIAL ISSUES EDITED

- 2016 P. A. Silva, F. Nunes, eds. (2016) “Special issue on fun and engaging computing technologies for health”, *Entertainment Computing*, 15: 41–70
- 2015 N. Verdezoto, F. Nunes, E. Grönvall, G. Fitzpatrick, C. Storni, M. Kyng, eds. (2015) “Proceedings of Designing Self-care for Everyday Life. Workshop in conjunction with NordiCHI 2014, 27th October 2014, Helsinki, Finland”, *DAIMI Report Series*, 41(597).
- 2014 N. Verdezoto, F. Nunes, G. Fitzpatrick, E. Grönvall, eds. (2014) “Designing Self-Care For Everyday Life”, *Interaction Design and Architecture(s) Journal - IxD&A*, 23: 142–190.

JOURNAL ARTICLES

- 2020 J. Almeida, F. Nunes (2020) “The Practical Work of Ensuring Effective Use of Serious Games in a Rehabilitation Clinic: A Qualitative Study”, *JMIR Rehabilitation and Assisted Technologies - JIRAT*, 7(1).
- 2017 F. Nunes, T. Andersen, G. Fitzpatrick (2017) “The agency of patients and carers in medical care and self-care technologies for interacting with doctors”, *Health Informatics Journal*, 1–20.
- 2016 F. Güldenpfennig, F. Nunes, G. Fitzpatrick (2016) “Making Space to Engage: An Open-ended Exploration of Technology Design with Older Adults”, *International Journal of Mobile Human Computer Interaction*, 8(2): 1–19.
- 2016 F. Nunes, P. A. Silva, J. Cevada, A. C. Barros, L. Teixeira (2015) “User Interface Design Guidelines for Smartphone Applications for People With Parkinson’s Disease”, *Universal Access in the Information Society*, 15(4): 659–679.
- 2015 F. Nunes, N. Verdezoto, G. Fitzpatrick, M. Kyng, E. Grönvall, C. Storni (2015) “Self-care Technologies in HCI: Trends, Tensions, and Opportunities”, *ACM Transactions on Computer Human Interaction*, 22(6), article 33: 1–45.
- 2015 F. Nunes, G. Fitzpatrick (2015) “Self-care Technologies and Collaboration”, *International Journal of Human Computer Interaction*, 31(12): 869–881.
- 2012 A. Aguiar, F. Nunes, M. Silva, P. A. Silva, D. Elias (2012) “Leveraging electronic ticketing to provide personalised navigation in a public transport network”, *Intelligent Transportation Systems Transactions and Magazine*, 13(1): 213–220.

FULL CONFERENCE PAPERS (PEER-REVIEWED)

- 2019 A. Pereira, D. Folgado, F. Nunes, J. Almeida, I. Sousa (2019) “Using Inertial Sensors to Evaluate Exercise Correctness in Electromyography-based Home Rehabilitation Systems”, *Proc. of MEMEA 2019*
- 2019 J. Silva, D. Gomes, F. Nunes, D. Moreira, J. Alves, A. Pereira, I. Sousa (2019) “Position-independent Physical Activity Monitoring: Development and Comparison with Market Devices”, *Proc. of MEMEA 2019*

- 2018 F. Nunes, G. Fitzpatrick (2018) "Understanding the mundane nature of self-care: Ethnographic accounts of people living with Parkinson's", *Proc. of CHI 2018*, 402:1–402:15
- 2018 F. Nunes, J. Ribeiro, C. Braga, P. Lopes "Supporting the Self-care Practices of Shift Workers", *Proc. of MUM 2018*, 71–81.
- 2018 J. Silva, E. Oliveira, D. Moreira, F. Nunes, M. Caic, J. Madureira, Eduardo Pereira (2018) "Design and evaluation of a fall prevention multiplayer game for senior care centres", *Proc. of ICEC 2018*, 103–114.
- 2013 P. Jordan, P. A. Silva, F. Nunes, R. Oliveira (2013) "mobileWAY – A System to Reduce the Feeling of Temporary Lonesomeness of Persons with Dementia and to Foster Inter-caregiver Collaboration", *Proc. of HICSS 2013*, 2474–2483.
- 2013 P. A. Silva, F. Nunes, A. Vasconcelos, M. Kerwin, R. Moutinho, P. Teixeira (2013) "Using the Smartphone Accelerometer to Monitor Fall Risk While Playing a Game: The Design and Usability Evaluation of Dance! Don't Fall", *Proc. of HCII 2013*, 754–763.
- 2012 F. Nunes, M. Kerwin, P. A. Silva (2012) "Design Recommendations for TV User Interfaces for Older Adults: Findings From the eCAALYX Project", *Proc. of ASSETS 2012*, 41–48.
- 2012 M. Kerwin, F. Nunes, P. A. Silva (2012) "Dance Don't Fall – Preventing Falls and Promoting Exercise at Home", *Proc. of pHealth 2012*, 254–259.
- 2012 A. Vasconcelos, P. A. Silva, J. Caseiro, F. Nunes, L. F. Teixeira (2012) "Designing Tablet-based Games for Seniors: the Example of Cogniplay, a Cognitive Gaming Platform", *Proc. of Fun & Games 2012*, 1–10.
- 2010 P. A. Silva, F. Nunes (2010) "3 x 7 Usability Testing Guidelines for Older Adults", *Proc. MEXIHC 2010*, 2: 1–8.
- 2010 F. Nunes, P. A. Silva, F. Abrantes (2010) "Human-Computer Interaction and the Older Adult: an Example Using User Research and Personas", *Proc. of PETRA 2010*, 49: 1–8.

SHORT CONFERENCE PAPERS (PEER-REVIEWED)

- 2018 A. Vasconcelos, F. Nunes, A. Carvalho, C. Correia (2018) "Mobile, Exercise-agnostic, Sensor-based Serious Games for Physical Rehabilitation at Home", *Proc. of TEI 2018*, 271–278.
- 2018 V. Guimarães, F. Nunes (2018) "A Wearable, Customizable, and Automated Auditory Cueing System to Stimulate Gait in Parkinson's", *Proc. of PervasiveHealth 2018*.
- 2018 A. Pereira, F. Nunes (2018) "Physical Activity Intensity Monitoring of Hospital Workers using a Wearable Sensor", *Proc. of PervasiveHealth 2018*.
- 2018 R. Peixoto, J. Ribeiro, E. Pereira, F. Nunes, A. Pereira (2018) "Designing the Smart Badge: A Wearable Device for Hospital Workers", *Proc. of PervasiveHealth 2018*.
- 2018 F. Aluvathingal, N. Verdezoto, F. Nunes (2018) "Exploring Challenges and Opportunities to Support People with Food Allergies to Find Safe Places for Eating Out", *Proc. of 32nd British HCI Conference*.
- 2017 F. Güldenpfennig, Ö. Subasi, F. Nunes, M. Urbanek (2017) "UbiKit: Learning to Prototype for Tangible and Ubiquitous Computing", *31st British HCI Conference*
- 2015 F. Güldenpfennig, F. Nunes, G. Fitzpatrick (2015) "Proxycare: Integrating informal care into formal settings", *Proc. of PervasiveHealth 2015*, 141–144.
- 2011 T. Marques, F. Nunes, P. A. Silva, R. Rodrigues (2011) "Tangible Interaction on Tabletops for Elderly People", *Proc. ICEC 2011*, pp. 440–443.
- 2011 T. Sousa, P. Tenreiro, P. A. Silva, F. Nunes, E. Rodrigues (2011) "Cross-platform social web

application for older adults with html 5”, *Proc. ICEC 2011*, pp. 375--378.

POSITION PAPERS (JURIED)

- 2020 C. Correia, E. Oliveira, F. Nunes (2020) “Using Illustration to Create More Inclusive User Interfaces for Older Adults”, in *Interactions*, 27(2), 79–81.
- 2019 F. Nunes (2019) “From medicalized to mundane self-care technologies”, in *Interactions*, 26(3), 67–69.
- 2019 S. Y. Park, F. Nunes, A. Berry, A. Büyüktür, L. de Russis, M. Czerwinski, W. Seo (2019) “Who Cares? Exploring the Concept of Care Networks for Designing Healthcare Technologies”, *Proc. of ECSCW 2019*.
- 2016 P. A. Silva, F. Nunes (2016) “Preface for the special issue on fun and engaging computing technologies for health”, in *Entertainment Computing*, 15: 41–42.
- 2016 F. Nunes (2016) “The medication reminder as enforcing a medicalised perspective on daily life”, in *Book of abstracts of the 6th STS Italia Conference*, 58.
- 2015 F. Nunes (2015) “Designing Self-care Technologies for Everyday Life: A Practice Approach”, *Proc. of CHI EA 2015*, 215–218.
- 2014 N. Verdezoto, F. Nunes, G. Fitzpatrick, E. Grönvall (2014) “Preface to the Focus Section”, in *Interaction Design and Architecture(s) Journal - IxD&A*, 23.
- 2013 F. Nunes (2013) “Improving the Self-care of Parkinson’s Through Ubiquitous Computing”, *Proc. of Ubicomp Adjunct 2013*.
- 2011 F. Nunes and, P. A. Silva (2011) “The Smartphone – A Mobile Companion for Older Adults”, *Proc. of Promoting and Supporting Healthy Living by Design Workshop at INTERACT 2011*, 41–43.
- 2011 P. M. Teixeira, P. A. Silva, F. Nunes, L. F. Teixeira (2011) “Mover – Activity Monitor and Fall Detector for Android”, *Proc. of Mobile Wellness Workshop at MobileHCI 2011*.
- 2010 F. Nunes, P. A. Silva (2010) “Fostering Wellness of Older Adults While Performing Usability Testing”, *Proc. of HCI4WELL Workshop at HCI2010*.
- 2009 A. Aguiar, F. Nunes, M. Silva, D. Elias (2009) “Personal Navigator for a Public Transport System Using RFID Ticketing”, *Proc. of inMotion09 Workshop at Pervasive 2009*.

INVITED PRESENTATIONS

- 09/09/2019 “Towards Mundane Personal Assistants” Keynote at Ubicomp Workshop on Ubiquitous Personal Assistance, London, UK.
- 03/05/2019 “Technology Assessment in Real Life” at Escola Superior de Saúde, Porto, Portugal.
- 14/09/2015 “Understanding and Promoting the Creation of Patient Knowledge Online” at University of Trento & FBK, Italy.
- 17/08/2015 “How can technology help people improve their self-care? Supporting engagement in their clinical consultations” at IT University of Copenhagen, Denmark.
- 17/08/2015 “Designing Self-care Technology for People with Parkinson’s: A Focus on Everyday Life” at University of Copenhagen, Denmark.
- 06/05/2011 “eCAALYX project” at the course Multimodal Interfaces of University of Porto, Portugal.

MEDIA MENTIONS

Mover was mentioned in the [Jornal de Negócios](#) (30/04/2010) and [Diário de Notícias](#) (29/05/2010). Smart Companion was described in [RTP](#) (01/08/2011), [Porto Canal](#), and another time at [Porto Canal](#) (26/07/2012) when I was even interviewed.

Languages

Portuguese – native

English – proficient

Spanish – fluent

French – intermediate (DELF A4 certificate)

German – intermediate (B1.1 certificate)

References

Geraldine Fitzpatrick, TU Wien (geraldine.fitzpatrick@tuwien.ac.at)

Ana Correia de Barros, Fraunhofer Portugal AICOS (ana.barros@fraunhofer.pt)

Paula Alexandra Silva, University of Aveiro (palexa@gmail.com)

Nuno Correia, Universidade NOVA de Lisboa (nmc@fct.unl.pt)

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