

# Francisco Nunes

Born: December 20, 1987—Porto, Portugal

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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

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

## Experience

- 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
- 2010-2012 Researcher, Fraunhofer Portugal AICOS, Porto
- 2008-2010 Research Assistant, Fraunhofer Portugal AICOS, Porto

## Grants, honours & awards

### ACQUIRED PROJECT GRANTS

- 2019 "Demonstration of EyeFundusScope with Non-Expert Ophthalmology users" funded by ANI (Portugal) –€117K  
*Lead proposal writer and co-PI.*
- 2011 "Smartphones for Smart Seniors (S4S)" funded by ANI (Portugal) – €137K

*Lead proposal writer.*

2011 “Personal Health Device for the Remote and Autonomous Management of Parkinson’s Disease (REMPARK)” funded by FP7-ICT (EU) – €411k

*Co-proposal writer.*

2011 “CellPipe UI” funded by Alcatel-Lucent – €49k

*Co-proposal writer.*

#### OTHER GRANTS AND HONOURS

2016 Two special recognitions for an ‘Excellent Review’ at CHI 2016

2016 Grant for attending conference from TU Wien (€1390)

2015 Grant for attending CHI 2015 doctoral consortium (\$1300)

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

Summer 2015 HCI in Healthcare (MSc) – Co-teaching and supervision of student projects at TU Wien

Winter 2014 User Research Methods (MSc)– Co-teaching and supervision of student proj. at TU Wien

\* Qualitative methods and co-design of self-care technologies – Invited lecture on self-care and self-care technologies at University of Copenhagen in 2016, 2017, and 2018.

#### SUPERVISED STUDENTS

2018 Cristiana Braga (MSc), Study of a self-management system for healthcare shiftworkers

2018 João Almeida (MSc), Restaurant recommendation system for people with food allergies

2015 Martin Herndl (BSc), Developing an Android Self-Management Application for People with Parkinson’s Disease

2012 João Cevada (MSc), User Interface Design Recommendations for Fitting Smartphone Applications to Persons With Parkinson’s

## Projects

#### ONGOING

2019-2021 *EyeFundusScopeNEO* (PT2020) – This project is piloting EyeFundusScope, a solution to screen diabetic retinopathy, in CUF Infante Santo. I am responsible for coordinating different validation studies.

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.

#### SELECTION OF PREVIOUS PROJECTS

- 2014-2018 *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/>
- 2015-2018 *MASPARK* (La Marató de TV3) – This project developed a system to detect and address freezing of gait in patients with Parkinson's. I was PI for 15 months, in charge of supervising the design and evaluation of the system.
- 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

- 2018 CHI 2019
- 2018 CSCW 2018
- 2016 Mindcare 2016
- 2016 PervasiveHealth 2016
- 2015 PervasiveHealth 2015
- \* And in workshops at ICEC '18, CHI '16, GROUP '14, Ubicomp '13, and SouthCHI '13

#### WORKSHOP ORGANIZER

- 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: 11; citations: 353 (source Google Scholar as at 02/2019)

### 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, and 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, and E. Grönvall, eds. (2014) “Designing Self-Care For Everyday Life”, *Interaction Design and Architecture(s) Journal - IxD&A*, 23: 142–190.

### JOURNAL ARTICLES

- 2017 F. Nunes, T. Andersen, and 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, and 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, and 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, and 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, and 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)

- 2018 F. Nunes, and 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, and R. Oliveira (2013) “mobileWAY – A System to Reduce the Feeling of Temporary Lonesomeness of Persons with Dementia and to Foster Inter-caregiver Collaboration”, in *Proc. of HICSS 2013*, 2474–2483.

- 2013 P. A. Silva, F. Nunes, A. Vasconcelos, M. Kerwin, R. Moutinho, and 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”, in *Proc. of HCII 2013*, 754–763.
- 2012 F. Nunes, M. Kerwin, and P. A. Silva (2012) “Design Recommendations for TV User Interfaces for Older Adults: Findings From the eCAALYX Project”, in *Proc. of ASSETS 2012*, 41–48.
- 2012 M. Kerwin, F. Nunes, and P. A. Silva (2012) “Dance Don’t Fall – Preventing Falls and Promoting Exercise at Home”, in *Proc. of pHealth 2012*, 254–259.
- 2012 A. Vasconcelos, P. A. Silva, J. Caseiro, F. Nunes, and L. F. Teixeira (2012) “Designing Tablet-based Games for Seniors: the Example of Cogniplay, a Cognitive Gaming Platform”, in *Proc. of Fun & Games 2012*, 1–10.
- 2010 P. A. Silva, and F. Nunes (2010) “3 x 7 Usability Testing Guidelines for Older Adults”, in *Proc. MEXIHC 2010*, 2: 1–8.
- 2010 F. Nunes, P. A. Silva, and F. Abrantes (2010) “Human-Computer Interaction and the Older Adult: an Example Using User Research and Personas”, in *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”, in *Proc. of PervasiveHealth 2018*.
- 2018 A. Pereira, F. Nunes (2018) “Physical Activity Intensity Monitoring of Hospital Workers using a Wearable Sensor”, in *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”, in *Proc. of PervasiveHealth 2018*.
- 2018 F. Aluvathingal, N. Verdezoto, and F. Nunes (2018) “Exploring Challenges and Opportunities to Support People with Food Allergies to Find Safe Places for Eating Out”, in *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, and G. Fitzpatrick (2015) “Proxycare: Integrating informal care into formal settings”, in *Proc. of PervasiveHealth 2015*, 141–144.
- 2011 T. Marques, F. Nunes, P. A. Silva, and R. Rodrigues (2011) “Tangible Interaction on Tabletops for Elderly People”, in *Proc. ICEC 2011*, pp. 440–443.
- 2011 T. Sousa, P. Tenreiro, P. A. Silva, F. Nunes, and E. Rodrigues (2011) “Cross-platform social web application for older adults with html 5”, in *Proc. ICEC 2011*, pp. 375–378.

#### POSITION PAPERS (JURIED)

- 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”, in *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”, in *Proc. of Ubicomp Adjunct 2013*.
- 2011 F. Nunes and, P. A. Silva (2011) “The Smartphone – A Mobile Companion for Older Adults”, in *Proc. of Promoting and Supporting Healthy Living by Design Workshop at INTERACT 2011*, 41–43.
- 2011 P. M. Teixeira, P. A. Silva, F. Nunes, and L. F. Teixeira (2011) “Mover – Activity Monitor and Fall Detector for Android”, in *Proc. of Mobile Wellness Workshop at MobileHCI 2011*.
- 2010 F. Nunes, and P. A. Silva (2010) “Fostering Wellness of Older Adults While Performing Usability Testing”, in *Proc. of HCI4WELL Workshop at HCI2010*.
- 2009 A. Aguiar, F. Nunes, M. Silva, and D. Elias (2009) “Personal Navigator for a Public Transport System Using RFID Ticketing”, in *Proc. of inMotion09 Workshop at Pervasive 2009*.

#### INVITED PRESENTATIONS

- 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.
- 27/10/2014 “The Self-care of Parkinson’s” at the Designing Self-care for Everyday Life Workshop at NordiCHI 2014 in Helsinki, Finland.
- 12/07/2012 “Design recommendations for TV user interfaces for older adults” at the Interactive Assistive Technologies for the Elderly Workshop in University of Aveiro, Portugal.
- 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](mailto:geraldine.fitzpatrick@tuwien.ac.at))

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