Alexandre De Masi

Researcher

Experiences

- 2023 **Scientific Collaborator**, *University Hospital of Geneva*, Switzerland, Data analysis and UX research on smart applications in pediatric emergency setting.
- 2023 **PostDoc Researcher**, *University of Geneva*, Switzerland, Managing the ACCOMPAGNY research project, a serious game to train parents' of teen suffering from anorexia.
- 2016 2023 **Research Scientist**, *University of Geneva*, Switzerland, Research and development to quantify and enhance Quality of Experience of smartphone application. Used quantitative and qualitative research methodologies, as well as behavioral and attitudinal research to enable higher quality smartphone application usage. Established and implemented an overall research strategy. Conducted longitudinal users studies with passive data collection and active surveys to enable statistical analysis and derived machine learning models.
- 2018 2023 Teaching Assistant, Lecturer: Introduction to Programming , University of Geneva, Switzerland, course for CUI/GSEM.
 Development of the course content (lessons, exercises, and exams) with Laurent Moccozet.
 Taught the class in English, provided student guidance. Promoted to lecturer in 2021. Mentoring students.
- 2020 2022 Research Scientist, University of Geneva, Switzerland, Development and deployment of an emotion recognition model (affective computing) based on speech for a Socially Assistive Robot, at the QoL Lab of Prof. Wac.
 Developed with deep learning models with Keras/TensorFlow. Followed a design thinking approach to correspond to the end-user needs (user stories, personas, journey maps). Collaboration with external teams (e.g., caretakers and health professionals) throughout Agile methods around Europe (AAL).
- 2020 2021 **Teaching Assistant**, *University of Geneva*, Switzerland, Multimodal and Affective Interaction Assistance in the design and development of student projects. Course managed by Laurent Moccozet and Guillaume Chanel.
- 2019 2020 **MOOC Coordinator**, *University of Geneva*, Switzerland, Development and creation of the "Introduction to Programming" MOOC for Coursera in French with Laurent Moccozet. Development of the course materials (quizzes and Jupyter notebook exercises) based on the Bloom's taxonomy. More than 1700 students on Coursera.

Education

- 2016 2023 **Ph.D in Information Systems and Services Science**, *University of Geneva*, Switzerland, "Modeling and enhancing Quality of Experience of Smartphone Application"
- 2013 2015 MSc Pervasive Computing and COMmunications for sustainable development (PERC-COM), *Master Erasmus Mundus*, Three diplomas
 - **MSc in Complex Systems Engineering**, *University of Lorraine*, France, Sustainable Computer Network Engineering
 - **MSc in Technology**, *Lappeenranta University of Technology*, Finland, Smart Software and Services
 - **MSc in Computer Science & Engineering**, *Luleå University of Technology*, Sweden, Pervasive Computing and Computers for Sustainable Development
- 2011 2012 BSc Science Engineering, University of Lorraine, France, Network
- 2009 2011 University Technology Diploma in Network and Telecommunication, Université Henry Poincarré, France, Network & Telecommunication

Skills and Tools

Research Qualitative and Quantitative, Open Science, FAIR, DRM, EMA, A/B Testing
ML Pandas, Numpy, scikit-learn, Keras, TensorFlow, XGBoost, Spark, Hugging Face, R
DataViz Matplotlib, Streamlit, Gradio, Seaborn, Dash, Bokeh, Plotly
DevOps Docker, AWS, GCP, git, Gitlab, CI, Kubernetes, Linux
Dev Python, C, C++, Kotlin, Java, Scala, Bash, SQL, MongoDB
Arch Raspberry Pi, ESP32, Coral, TPU, GPU
Network IPv4, IPv6, TCP/UDP, QUIC, MPTCP, VoIP, SNMP, IPoAC

Selected Publications

Alexandre De Masi and Katarzyna Wac. "Less Annoying: Quality of Experience of Commonly Used Mobile Applications". In: *Proceedings of the 13th ACM Multimedia Systems Conference*. MMSys '22. Athlone, Ireland: Association for Computing Machinery, 2022. DOI: 10.1145/3524273.3528183. URL: https://doi.org/10.1145/3524273.3528183

Alexandre De Masi and Katarzyna Wac. "The Importance of Smartphone Connectivity in Quality of Life". In: *Quantifying Quality of Life: Incorporating Daily Life into Medicine*. Ed. by Katarzyna Wac and Sharon Wulfovich. Health Informatics. Cham: Springer International Publishing, 2022, pp. 523–551. ISBN: 978-3-030-94212-0. DOI: 10.1007/978-3-030-94212-0_23

Alexandre De Masi and Katarzyna Wac. "Predicting Quality of Experience of Popular Mobile Applications from a Living Lab Study". In: 2019 Eleventh International Conference on Quality of Multimedia Experience (QoMEX) (QoMEX 2019). Berlin, Germany, June 2019 ***Best Student Paper Award**

Alexandre De Masi and Katarzyna Wac. "You're Using This App For What? mQoL Living Lab Study". In: *UbiComp/ISWC'18 Adjunct*. UbiComp '18. Singapour, Singapour: ACM, 2018

Alexandre De Masi, Matteo Ciman, Mattia Gustarini, and Katarzyna Wac. "mQoL Smart Lab: Quality of Life Living Lab for Interdisciplinary Experiments". In: *Proceedings of the 2016 ACM International Joint Conference on Pervasive and Ubiquitous Computing: Adjunct*. UbiComp '16. Heidelberg, Germany: ACM, 2016

Languages

FrenchNative languageEnglishFull professional proficiencyItalianBeginnerChineseBeginner