

**EMPLOYMENT**

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**Senior Scientist**

**Tecnalia Foundation, San Sebastián, Spain**

**2008 - 2016**

Expertise

- Expertise in finding and extracting key information about novel domains, spanning ethnography, interviewing, literature and in-the-field practitioners. (ASSISTANT, Fidemaïd)
- Stakeholder work, professionals and end-users (including proxy-users) but also policy and legal stakeholders. (Cognitive Reminders)
- Field research - instrumented probes & ethnography as well as coding and transforming data into actionable formative results as well as unbiased summative evaluation. (ASSISTANT, Haptimap)
- Skilled at lab based usability testing, experiments from the perspective of cognitive science, think aloud, capturing useful lab based events and making actionable results out of them (ASSISTANT)
- Extensive experience in designing neutral and useful surveys and semi-structured interview templates
- Wireframe, paper, lo-fi and mid-fi (dynamic) prototype constructions and supervision as well as multiple simultaneous prototype evaluation and merging. (ASSISTANT, Fidemaïd, Cognitive Reminders)
- Experienced at designing field trials that produce actionable results, managing debugging, refactoring and interface improvement while performing regression testing as appropriate. (ASSISTANT, Haptimap)
- Skilled at summative testing, from generating the appropriate parameters of the summative tests in the requirement phase to designing scenarios of use to be tested in and generation of results that support iterative improvement in the user centered design process.

Projects and research:

Neuroengineering Department (2008-11) Assistive Technology Department (2011-16)

- **Internal**
  - Fidemaïd - End-user research (interviews and prototype evaluation) in supporting elders perceiving, making financial decisions and potential problem alerts aimed at aging-in-place for elders.
  - Contextual Reminders - Implementing a prototype to mitigate 'the senior moment' based on the 'cognitive interview'.
- Haptimap - Evaluating novel multimodal perceptualizations for Location Based Services; investigating multimodal feedback to augment and replace visual feedback for diverse users (including deaf-blind) in diverse situations (e.g. City streets, parks, plazas)
- ASSISTANT a 2.7M€ AAL / EU 3 year project, P.I.. Directed Description of Work, high level design, scenarios of use, and requirements gathering. Lead design of interfaces for smartphone and web based route and preference editor, optimized for elders, and with deep interface and behaviour personalization. Designed framework for error trapping and mitigation for user/system/environmental failures. The system was successfully (i.e. no system failures) and effectively (100 trips over 2 weeks) field trialed in 3 European cities of varying types and sizes. System design for easy/low-resource implementation in diverse transit systems, especially smaller transit organizations, to mitigate this digital divide (i.e. missing resources for creating bespoke systems).

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**Staff Scientist (Post-doc)**

**Fraunhofer Institute , Sankt Augustin, Germany**

**2006 - 2008**

- A standards based set of metadata (in the form of an ontology) mapping disabilities, devices, and appropriate educational material and their respective metadata.
  - BIKa (Barrier-free Information and Communication Technologies for All) Web Compliance Center
    - EU4ALL EC project - designed and implemented algorithm for providing pedagogical material based on standardized user, digital devices and adaptation models
    - DfA@eInclusion EC projects designed and lead a workshop on Design For All practices in EU industry.
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