

# David Rei, Ph.D.

✉ david.rei@exploptimist.eu

🌐 https://exploptimist.eu

🐙 @Divadriel

🌐 David Rei

🎮 @Divadriel on itch.io



## Employment History






- Sep. 2019 – Aug. 2024
- 📌 **Ph.D. Student.** LISN, CNRS, Paris-Saclay University. Development of an Android app, 3 field studies, 1 online survey. PhD defended in March 2024.
  - 📌 **Assistant Lecturer.** Orsay Faculty of Sciences, Paris-Saclay University, Orsay, France. 473h. Lectures in databases, object oriented programming, web programming, software engineering, UML, HMI.
- Jan. 2019 – Aug. 2019
- 📌 **Research Engineer.** LISN, CNRS, Paris-Saclay University. State of the art in human-computer interactions, adaptive interactions, persuasive technologies, psychology (RFT, SDT, motivation).
- Feb. 2016 – Jul. 2017
- 📌 **Software Engineer.** EMA Hemodialyse, Aix-en-Provence. Development of "Active Directory" and "Transplantation" modules for Hemodialyse and "UWAP" project.

## Education

- 2019 – 2024
- 📌 **Ph.D., Paris-Saclay University** in Computer Science.  
Thesis title: *Human-Machine Interactions Adapted to the Personality of Users: Application of Motivation to Physical Activity.*  
Supervisors: Professor Jean-Claude Martin, Associate Professors Brian Ravenet and Céline Clavel
- 2017 – 2018
- 📌 **Research M.Sc. Electrical Engineering, Paris-Saclay University** in Virtual Reality and Intelligent Systems.  
Ranked 1<sup>st</sup>/24. Internship subject: *Adaptive difficulty model for post-stroke motor rehabilitation of the upper limb.*
- 2013 – 2016
- 📌 **Eng. Biomedical Engineering, Polytech Marseille.**  
Biomedical engineer motto: *"From scanner to scalpel".*







## Teachings


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- 2023 – 2024     Object oriented programming - basics (L2 Computer Science - S3) - 48h  
Databases 2 (L3 Computer Science - S6) - 12h  
Databases 2 Miage (L3 Computer Science Miage - S6) - 12h  
Web Programming (L3 Computer Science - S6) - 48h  
Object oriented programming and software engineering (L3 Computer Science - S6) - 48h  
UML (Polytech ET3 - S6) - 14h  
Human-Machine Interaction (Polytech ET3 - S6) - 12h
- 2022 – 2023     Object oriented programming - basics (L2 Computer Science - S3) - 24h  
Databases 2 (L3 Computer Science - S6) - 12h  
Databases 2 Miage (L3 Computer Science Miage - S6) - 12h  
Web Programming (L3 Computer Science - S6) - 48h
- 2021 – 2022     Advanced databases (DUT 2 - S3) - 18h  
Object oriented programming - basics (BUT 1 - S2) - 42h  
Project monitoring (BUT 1 - S2) - 6h: "Analysis and Quality"
- 2020 – 2021     Advanced databases (DUT 2 - S3) - 18h  
Object oriented programming - basics (DUT 1 - S2) - 42h
- 2019 – 2020     Advanced databases (DUT2 - S3) - 36h  
Object oriented programming - basics (DUT 1 - S2) - 21h

## Research Publications






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- 1 David Rei. "Interactions Humain-Machine Adaptées à la Personnalité des Utilisateurs: Application de Motivation à l'Activité Physique". PhD thesis. Université Paris-Saclay, 2024.  URL: <https://hal.science/tel-04538519/>.
- 2 David Rei. *PADME*. Version v57 and v77. June 2024.  URL: <https://hal.science/hal-04614660>.
- 3 David Rei, Jean-Claude Martin, and Céline Clavel. "Interactions Humain-Machine adaptées à la personnalité des utilisateurs". In: *Poster presented at Neuroscience et multimodalité dans les interactions humain-humain, humain-agent ou humain-robot*. Paris, France, 2019.  URL: <https://hal.science/hal-02161272>.
- 4 David Rei et al. "PADMEH: Personality-based Adaptive moDEL for Mobile E-Health". In: *Fourth HUMANIZE workshop on Transparency and Explainability in Adaptive Systems through User Modeling Grounded in Psychological Theory*. ACM. 2020.  URL: <https://hal.science/hal-03758777>.
- 5 David Rei et al. "Towards Personalised Virtual Coaching Based on Self-Determination Theory and Regulatory Focus Theory". In: *Oral presentation given at 10th European Conference on Positive Psychology (ECP2022)*. SENA. Reykjavik, Iceland, June 2022.  URL: <https://hal.science/hal-03758734>.
- 6 David Rei et al. "Intervention mobile pour la motivation à marcher: Impact de l'adaptation des objectifs et des messages motivationnels". In: *Colloque en TéléSANTé et dispositifs biomédicaux*. "Saint-Denis, France", 2023.  URL: <https://hal.science/hal-04220657>.

- 7 David Rei et al. "Adapting goals and motivational messages on smartphones for motivation to walk". In: *Smart Health* 32 (2024), p. 100482. ISSN: 2352-6483.  DOI: <https://doi.org/10.1016/j.smhl.2024.100482>.

## Skills

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- Languages  Reading, writing and speaking fluency for English (C1) and French (C2).
- Technical skills  Java (Android), HTML, CSS, PHP, JavaScript, Bootstrap framework, MySQL, PL/SQL,  $\LaTeX$ .
- Soft Skills  curiosity, open-mindedness, listening and communication, analytical and critical thinking, synthesis, decision-making, tenacity, perseverance, adaptability, integrity
- Software  Git/Gitlab, Android Studio, IntelliJ, VS Code, GDevelop (game engine), JASP (statistical analysis), Adobe XD, Balsamiq, [diagrams.net/draw.io](https://diagrams.net/draw.io)
- Misc.  Academic research, teaching, team management,  $\LaTeX$  typesetting and publishing, statistical analysis.

## Miscellaneous Experience

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### Certification

- 2024  **Certified Emergency Response Officer**. Trained by Paris-Saclay University.

## References

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Available on Request