LUANA **THOMAS**

iOS Developer

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22 years 👤



Porto Alegre - RS





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ABOUT ME

Currently, I study Computer Science at PUCRS and work as an iOS developer at the Apple Developer Academy, with experience in SwiftUI and UIKit, as well as other Apple frameworks such as CoreMotion, CoreML, SpriteKit, and AudioKit. My interest in academic research in the area of data privacy led to the presentation of a paper at the 37th Annual IFIP WG 11.3 Conference on Data and Applications Security and Privacy (DBSec'23) in Sophia Antipolis, France. In the following sections, I discuss my professional experience and projects developed.

EXPERIENCE

Apple Developer Academy - PUCRS

2023 - Currently

I work as an iOS Developer, utilizing various Apple frameworks, and extensively researching the user experience (UX/UI) field. I have deepened my understanding of project architecture and employ agile methodologies.

Postgraduate Program in Computer Science - Internship

2021 - 2023

I participated in the Systems Reliability and Security research group, working on projects that explored new approaches to implementing data privacy models without compromising usability. I had an article published on this topic.

Madesa Furniture

2019 - Currently

I have worked on tasks related to computer formatting, backup, and maintenance, Active Directory management, and access control through firewall settings. I assisted in the programming of a Yaskawa palletizing robot and developed an internal helpdesk system. Currently, I am focused on analyzing the company's e-commerce data.

EDUCATION

Computer Science - PUCRS

2021 - Currently (Expected completion: July 2025)

Computer Technician integrated into High School - IFRS Campus Feliz

2017 - 2021

SKILLS



























PROJECTS



Senses

SWIFT | SWIFTUI | COREDATA | MVVM

Developed in one month, Senses is a card game that explores players' emotions, fostering debates and reflections.

AppStore: https://apple.co/3J5foXO



OnKey

SWIFT | SWIFTUI | SCRUM | AUDIOKIT | COMBINE | MVVM | ACESSIBILIDADE

Onkey is an accessible virtual piano developed in 2 months.

App Store: https://apple.co/3Nf9y90



Cabide

SWIFT | UIKIT | COREDATA | SCRUM | MVVM | STORYBOARD | COREML

Cabide is a virtual wardrobe where users can create outfits with their own clothes from anywhere. Developed in 2 months.

App Store: https://apple.co/4clkDte



ByteVerse

SWIFT | SPRITEKIT | COREMOTION | HAPTICS

A game inspired by Space Invaders, developed in just 1 week, using the SpriteKit framework.

App Store: https://apple.co/3TNppOi



SWIFT | SWIFTUI | COREMOTION | MVVM | ACESSIBILIDADE | WATCHKIT

Developed in two weeks, Flipty is an app that brings classic decision-making to your fingertips, on iPhone or Apple Watch.

AppStore: https://apple.co/4b8iUwA

ACADEMIC RESEARCH

Impact of using a privacy model on smart buildings data for CO2 prediction

https://link.springer.com/chapter/10.1007/978-3-031-37586-6 8

There is a constant trade-off between the utility of the data collected and processed by the many systems forming the Internet of Things (IoT) revolution and the privacy concerns of the users living in the spaces hosting these sensors. Privacy models, such as the SITA (Spatial, Identity, Temporal, and Activity) model, can help address this trade-off. In this paper, we focus on the problem of CO2 prediction, which is crucial for health monitoring but can be used to monitor occupancy, which might reveal some private information.

We apply a number of transformations on a real dataset from a Smart Building to simulate different SITA configurations on the collected data. We use the transformed data with multiple Machine Learning (ML) techniques to analyse the performance of the models to predict CO2 levels.

Our results show that, for different algorithms, different SITA configurations do not make one algorithm perform better or worse than others, compared to the baseline data; also, in our experiments, the temporal dimension was particularly sensitive, with scores decreasing up to 18.9% between the original and the transformed data.

The results can be useful to show the effect of different levels of data privacy on the data utility of IoT applications, and can also help to identify which parameters are more relevant for those systems so that higher privacy settings can be adopted while data utility is still preserved.