# JOÃO FERREIRA LOFF

Sep 2015 – Exp. 2024

#### EDUCATION

#### **PHD Researcher**

#### INESC-ID Lisboa

• Cross-Service Consistency for Large Scale Distributed Applications: we aim at providing meaningful consistency between services with different consistency semantics.

#### **Research Intern**

# VMware Research Group @ Palo Alto

• *Weave:* automating management planes using constraint program synthesis. We applied constraint solving into cluster management by taking a cluster's management plane described in SQL and automatically synthetize it into a constraint program. Supervised by Lalith Suresh.

# Visiting Researcher

# University of Texas @ Austin

• *Improving F2FS energy consumption:* worked on improving F2FS by replacing random with sequential IO access approach. Goal is to reduce energy conception on DB systems. Supervised by Vijay Chidambaram.

# **Master's Degree**

# Instituto Superior Técnico

- Thesis in Predictive Elasticity for Cloud Computing applications. Published at IEEE CloudCom 2014.
- B.S.E and M.S.E. in Computer Science and Engineering with Major in Software Engineering

# SELECTED PUBLISHED PAPERS

- J. Loff, et. al. "Antipode: Enforcing Cross-Service Causal Consistency in Distributed Applications" in Proc. of Symposium on Operating Systems Principles (SOSP 2023)
- L. Suresh, et. al. *"Building scalable and flexible cluster managers using declarative programming"* in Proc. of Usenix Conference on Operating Systems Design and Implementation (OSDI 2020)
- L. Suresh, et. al. "Synthesizing Cluster Management Code for Distributed Systems" in Proc. of Workshop on Hot Topics in Operating Systems (HotOS 2019)
- J. Loff, et. al. *"Transparent Cross-System Consistency"* in Proc. of Workshop on Principles and Practice of Consistency for Distributed Data (co-located with EuroSys'17)
- D. Porto, et. al. "Making data center computations fast, but not so furious" in 7th Workshop on Multi-core and Rack-scale Systems (co-located with EuroSys'17)
- J. Loff and J. Garcia. "Vadara: Predictive Elasticity for Cloud Applications" in Proc. of IEEE CloudCom 2014

# **PROGRAMMING LANGUAGES AND TECHNOLOGIES**

- Languages: Java, Python, Ruby, SQL
- Frameworks: Docker, gRPC, Thrift, AWS, RabbitMQ, MongoDB, Redis

# EMPLOYMENT

# Co-Founder & CTO

- Flecto is the platform that makes businesses thrive in the Circular Economy.
- Worked as CTO and Lead Backend developer. Responsible for architecture and build team.

Flecto

# Associate Software Engineer Accenture Technology Solutions

- Implemented a demand forecasting workflow to improve field force task management
- Implemented a mobile-based solution using ClickSoftware integrated with SAP

# ACADEMIC EVENTS

- EuroSys Doctoral Workshop (EuroDW 2016) @ EuroSys 2016: Presented my PhD proposal entitled "Integrating strong consistency across multiple stateful services"
- Technical Book Reviewer for "Implementing Cloud Patterns in AWS": Focused on reviewing technical details regarding deploying known cloud computing patterns on AWS. Published by PACKT Publishing

# Summer 2018

Summer 2017

# more @ Google Scholar

**Completed Fall 2014** 

# Open source @ github.com/jfloff

Apr 2016 -

Nov 2014 - Sep 2015