

Francesco PACE frgpace@gmail.com

WebSite 🔾 francesco-pace.com GitHub (7) fraPace Linkedin in fpace



Francesco PACE, Ph.D.

Cloud and Distributed Systems

Summary Detail-oriented Ph.D. in Cloud and Distributed Systems with 3+ years experience in scheduling algorithms, systems aspects related to the design and implementation of distributed, large-scale computer programs, and original approaches involving non-trivial machine learning algorithms for time-series forecasting. Also 3+ years experience as leading Teaching Assistant for two data science related courses: one on cloud computing and distributed systems, the other on algorithmic machine learning. Currently developing architect and governance skills at Amadeus as part of the Architecture Strategy and Governance team.

Experience

Amadeus

September 2018 - Current

Part of the Architecture Strategy and Governance team. I am activily working on Data Governance and as Ambassador for Cloud technologies. In addition I am exploring possible topics to improve Amadeus business.

Zoe-Analytics 2015 - 2018

Built by Eurecom in 2015, my focus was on novel scheduling algorithms to improve the responsiveness of the system. Zoe has been adopted in 2017 by Air France-KLM, in Orly and Amsterdam centers, KPMG, in Frankfurt and Berlin datacenters. Recently it has been taken into consideration for another H2020 European Project (BigDataStack).

IOStack - H2020 European Project

2015 - 2018

Consortium of 8 partners (3 academic and 5 industrial). My task was to develop novel approaches for scheduling of analytics applications in compute clusters and to manage Eurecom's work package. In addition, with the collaboration of IBM Research - Haifa, I worked on the research aspect of the Stocator connector, now in production at IBM.

Leading Teaching Assistant

2015 - 2018

Leading Teaching Assistant for two courses in the Data Science department at Eurecom: (i) Distributed Systems and Cloud Computing and (ii) Algorithmic Machine Learning

Co-Founder & CTO of Improoving.me

2014 - 2016

In collaboration with a partner we decided to create a startup called Improoving.me. The business goal is to provide an easy and efficient booking system for ski and snowboard schools around the globe. My task was to investigate the technologies to use, to plan the software developing of the platform and to build the back-end from scratch.

High Speed Network Full Packet Recorder

2013 - 2014

In partnership with Narus (acquired by Symantec in 2015). My task was to design and build a system capable of capturing and writing on disk the traffic coming from wired high speed links (higher than 20 Gbps).

Gervasi-Configurator

2012 - 2014

Part of a two-member group, we were tasked to build the full stack for an online service dedicated to the sales department of Gervasi. The service is able to estimate prices for their products.

Magneti Marelli Internship

May 2012 - July 2012

Created a software that could analyze the CAN message transmitted in a car network.

Education

Ph.D. Cloud and Distributed Systems

2015 - 2018

Com-

Telecom ParisTech / Eurecom

Thesis Title: Mechanisms for Efficient and Responsive Distributed Applications in pute Clusters

Supervisor: Prof. Pietro Michiardi, head of Data Science Department at Eurecom

MSc Computer Engineering - Networking

2009 - 2014

Politecnico di Torino

Thesis Title: Line Rate Packet Capture and Storage on High Speed Networks

Final Mark: 110/110

BSc Computer Engineering

2009 - 2012

Politecnico di Torino

Francesco PACE frgpace@gmail.com

WebSite francesco-pace.com
GitHub fraPace
Linkedin in
fpace



Certifications

Amazon AWS Certified Cloud Practitioner

Validation Number: YRCHKR521FQQQ4KB

Publications

Data-Driven Resource Shaping for Compute Clusters. Pace, Francesco; Milios, Dimitrios; Venzano, Daniele; Carra, Damiano; Michiardi, Pietro. *In Submission at ACM SoCC'18, October 2018*

Stocator: Providing High Performance and Fault Tolerance for Apache Spark over Object Storage. Vernik, Gil; Factor, Michael; Kolodner, Elliot; Ofer, Effi; Pace, Francesco; Michiardi, Pietro. *IEEE/ACM CCGrid'18, May 2018*

Flexible scheduling of distributed analytic applications. Pace, Francesco; Venzano, Daniele; Carra, Damiano; Michiardi, Pietro. *IEEE/ACM CCGrid'17, May 2017*

Too big to eat: Boosting analytics data ingestion from object stores with Scoop. Moatti, Yosef; Rom, Eran; Gracia-Tinedo, Raul; Naor, Dalit; Chen, Doron; Sampe, Josep; Sanchez-Artigas, Marc; Garcia-Lopez, Pedro; Gluszak, Filip; Deschdt, Eric; Pace, Francesco; Venzano, Daniele; Michiardi, Pietro. *IEEE ICDE'17, April 2017*

Experimental performance evaluation of cloud-based analytics-as-a-service. Pace, Francesco; Milanesio, Marco; Venzano, Daniele; Carra, Damiano; Michiardi, Pietro. *IEEE CLOUD'16, June 2016*

Communication Skills

Presentation to European Commission

January 2018

Presented Zoe-Analytics at the final review of IOStack - H2020 European Project. *Type of audience*: Researchers, engineers, CEOs, CTOs and European Commission officials

Poster to ICDE'17 April 2017

Presented poster of the published paper.

Type of audience: Researchers and engineers both academics and industrials

Presentations to Different Conferences

2016 - 2018

Presented various research contributions from different publications. *Type of audience*: Researchers and engineers both academics and industrials

Software Development Skills

Programming

- Python (Expert)Java (Expert)Scala (Intermediate)
- C (Intermediate) C++ (Intermediate)

Frameworks

- Spark (Expert)
 Hadoop (Expert)
 HDFS (Expert)
- Docker (Intermediate)
 Pytorch (Beginner)
 Kubernetes (Beginner)

Interests

Professional

Research, data analysis, data engineering, system design, scheduling, software design, programming, online challenges

Personal

Sports, hiking (Seven Summits), e-sports, tv-shows, movies, photo

November 2018