

Alessandro Marrella

hello@alessandromarrella.com | linkedin.com/in/alessandromarrella | twitter.com/amarrella | github.com/amarrella

I'm a Software Engineer doing functional programming in Scala. I apply functional programming principles (such as immutability, total functions, referential transparency) and leverage category theory with patterns such as free monads and tagless final. I contribute to opensource libraries and services in the functional scala ecosystem such as fs2, http4s and apibuilder.

Work Experience

Software Engineer

Jul 2017 – Now

Gilt.com (HBC)

I develop functional programs in Scala that serve personalized content across the HBC banners: Gilt.com (before it got divested in July 2018), Saks Fifth Avenue, SaksOFF5th and Lord&Taylor. Currently I'm developing the GraphQL backend that will serve all the new stack and working on infrastructural tasks around a shared Kubernetes cluster such as introducing Istio, figuring out DNS and improving service observability with monitoring and tracing.

Data Scientist & Big Data Engineer

Oct 2016 – Jul 2017

AIB, Data Science and Solutions, Dublin, Ireland

- Designed and developed a machine learning solution able to predict and prevent drop offs in customer online journeys in real time collecting clickstream data from Kafka and processing it with Spark Streaming
- Developed a metadata-driven ETL application using Python, Scala and Apache Spark
- Developed an anomaly detection system with a Lambda architecture leveraging Hadoop, Kafka and Spark able to identify issues on all the online channels and send alerts

Data Anonymization Internship (MSc Thesis Research)

Mar 2016 – Aug 2016

ABB AG, Corporate Research, Ladenburg, Germany

- Implemented and extended of state-of-the-art privacy-preserving machine learning algorithms
- Evaluated on the impact of anonymization on data privacy and quality
- Published as first author the paper "Privacy-Preserving Outsourcing of Pattern Mining of Event-Log Data - A Use-Case from Process Industry" – listed below in the publications

Education

Master of Science in **Computer Science**

Sep 2014 – Oct 2016

Major: Business Informatics

University of Pisa, Italy

GPA: 29.33/30.0 | Final grade: 110/110 *cum laude*

Bachelor's Degree in **Business Administration**

Sep 2010 – Sep 2014

University of Verona, Italy

GPA: 27.3/30.0 | Final grade: 109/110

Exchange year (**Erasmus** scholarship)

Sep 2013 – May 2014

University College Dublin, Ireland

Publications

Marrella, Alessandro, et al. "Privacy-Preserving Outsourcing of Pattern Mining of Event-Log Data-A Use-Case from Process Industry." *Cloud Computing Technology and Science (CloudCom), 2016 IEEE International Conference on*. IEEE, 2016.

Volunteer

Communication Manager - Erasmus Student Network, Pisa, Italy

Dec 2014 – Jul 2015

Public Relations Officer - Erasmus Student Network, Dublin, Ireland

Jan 2014 – May 2015

Emergency Medical Technician - Croce Verde, Verona, Italy

Dec 2012 – Sep 2013

Skills

Programming languages: Preference for functional programming in **Scala** or better ☺ but I have also knowledge in Python and Java.

Cloud: Experience with AWS & Kubernetes

Foreign Languages: *Italian:* native, *English:* fluent, *German:* basic