Andrea Baldan

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EDUCATION

UNIVERSITÀ DEGLI STUDI DI PADOVA
BSc Degree in Computer Science
Dec 2016 | Padova, Veneto

SKILLS

PROGRAMMING

- OOP & Design Patterns
- FP
- TDD
- Requirements Analysis
- Scripting & Documentation
- Microservices architecture
- Serverless

TECHNICALS

- Languages:
  C/C++, Java, Scala, Python, Go
- Databases:
  MySQL/Postgres, Influxdb, Redis, MongoDB

LIBRARIES & FRAMEWORKS

- Flask
- Celery
- Akka - Reactive Programming
- Apache Kafka and Kafka Streams

TOOLS

- Git
- GitHub/Gitlab/BitBucket
- Travis-CI
- Grafana
- Mosquitto
- Nginx
- Docker
- Kubernetes
- Serverless framework
- AWS Cloud (mainly EC2, S3, IoT Core, Kinesis, DynamoDB)

LINKS

codepr.github.io
github.com/codepr
Andrea Baldan

EXPERIENCE

ELEMIZE TECHNOLOGIES S.R.L.

Software Engineer - Back end Developer | May 2017 - Mar 2020 | Roma, Lazio

Back end development and architecture designer of an IoT infrastructure for innovative solutions on the field renewable energy, focussing on microservices and serverless automations.

- Designed and implemented an IoT architecture on AWS cloud for data ingestion and processing, migrating from an MVP one which used to serve few dozens of devices to a multiple thousands capable one
- Developed benchmarks and end-to-end testing of cloud-side architecture
- Developed a scalable cloud-side coordinator for edge devices monitoring and control
- Edge side development on ARM32 devices

NEXT - INGEGNERIA DEI SISTEMI S.P.A.

Software Engineer | Mar 2017 - May 2017 | Roma, Lazio

Main duties involved developing and testing of an Enhanced Testing Framework namely TESE-subsystem for an ATM system regarding european project 4Flight.

WARDA S.R.L.

Back End Developer Internship | Jul 2016 - Oct 2016 | Padova, Veneto

Designed and developed an event-driven prototype for the back end part of a DAM (Digital Assets Management) platform, based on a CQRS architecture with high performance and easy scalability, featuring Apache Kafka Streams libraries and functional programming in Scala.

SIDE PROJECTS

SOL https://github.com/codepr/sol
Lightweight MQTT broker, written from scratch. IO is handled by a super simple event loop based upon the most common IO multiplexing implementations.

LLB https://github.com/codepr/llb
Dead simple event-driven load-balancer, Supports Linux (and arguably OSX) through epoll and poll/select (kqueue on BSD-like) as fallback

EV https://github.com/codepr/ev
Lightweight dependency-free event library loosely inspired by the excellent libuv, in a single small header, based on the common IO multiplexing implementations available.

TASQ https://github.com/codepr/tasq
A simple task queue implementation leveraging zmq and a naive implementation of the actor model to enqeue jobs on local or remote processes

NARWHAL https://github.com/codepr/narwhal
PoC of a very simple RESTful CI system orchestrating a pool of Docker containers

GALLERY AS A STREAM private repository
A prototype for the backend side of a DAM platform designed as a CQRS model, reactive programming developed in Scala with Apache Kafka Streams and Akka

TIMEPIPE https://github.com/codepr/timepipe.git
A lightweight transient in-memory time-series database. Rudimental TSDB without persistence, originally written in C, rewritten in Go to practice the language