Mateusz “Serafin” Gajewski

Experienced Software Engineer • Architect • Lead

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“If you are not improving, entropy guarantees that you are actually getting worse.”
— ***Gene Kim, The Phoenix Project***

Summary

I am an experienced software engineer, architect *&* lead **interested in designing and building high quality, scalable, low-latency, distributed systems**. I code in various languages and use many different technologies always trying to find the right tool to solve given problem. In everyday work I follow principles of **Lean Product Development** and **Software Craftsmanship** both to enjoy work and deliver high quality solutions. Up-to-date list of publications, certifications, attended conferences and courses are available on my LinkedIn profile.

Experience

09.2015 – 05.2017 **Allegro Group**
Solutions Architect *&* Team Lead (Marketing, Advertising *&* Content Systems) Poznań, Warsaw

Summary: After successfully rewriting major parts of the legacy system, I transferred to another department to develop new greenfield projects.

Adserving platform

During last 5 months of work in Allegro I was responsible for assessing, auditing and choosing new adserving platform for Allegro. During this period I’ve conducted several meetings with external providers gathering requirements and specifying technical RFP.

Allegro Pay-Per-Click Engine

While in project I was responsible for business analysis, overall system architecture, selections of technologies, initial teams setup and building various ***Proof of Concepts***. Most of my time was spent coding, mentoring and conducting internal trainings. I was working closely with the infrastructure teams on extending Mesos infrastructure to support project’s performance and latency requirements.

Technologies[1]: ECMAScript 6, Golang, hwloc, Kotlin, React.js and Redux

07.2013 – 08.2015 **Allegro Group**
Solutions Architect (Financial *&* Payments Systems) Poznań, Warsaw

Summary: After ***New Platform Project*** I’ve taken on the challenge to work out foundations of a new fine-grained SOA architecture (***microservices***).

Project Rubicon

Project Rubicon was the attempt to rewrite Allegro’s legacy system (12M+ LoC in the PHP/C/C++) into scalable, microservices based architecture (JVM-based). I was the co-author of initial requirements and high-low level architecture of the whole system. Upon completion I was honored to become first Solutions Architect in the company. During the 2 year period I worked with 6 agile teams from 2 different locations and 2 business domains (finance and payments) to rewrite pieces of the old system. In the finance domain we had successfully deployed new billing, invoicing, debt collecting, pricing and discounting services. Whereas in the payments domain we’ve managed to built from the ground up new integration with external PSP (PayU) reducing overall complexity of the system. During the project I was responsible for the architecture, performance, capacity of

new services and quality of the code. I've conducted multiple internal training sessions on new technologies, frameworks and languages.

Technologies[1]: Gradle, Java 8, Kafka, Hystrix, Marathon, Mesos, RxJava, Spark, Spring Boot and Spock

11.2011 – 06.2013 **Allegro Group**
Expert Programmer Poznań

Summary: While working within the Maintenance Team I've gained a deep understanding of platform bottlenecks and limitations. Having that knowledge I have moved to a team responsible for working out new directions of Allegro's platform evolution.

New Allegro Platform

The main goal of the project was to identify possible ways of rewriting core Allegro platform written in PHP 4.x. During the course of several months as a scrum team member I've implemented various PoC's in PHP 5.x, Java 6 and C and we have successfully integrated rewritten parts of the platform.

Technologies[1]: Cassandra, Java 6, Guice, Hadoop, HBase, MongoDB, OpenStack, Protobuf, Puppet, Symfony and ZooKeeper

06.2009 – 10.2011 **Allegro Group**
Programmer • Senior Programmer • Application Incident Manager Poznań

Summary: As a member of Maintenance Team I was asked to design and implement Incident Management process according to ITIL v3 best practices. During the 2 years period I handled major incidents and failures, prepared and tested switchover and failover procedures, refactored parts of the system to increase both overall performance and stability.

Hailstorm

Project Hailstorm was a successful effort to increase overall platform capacity by sharding main Oracle database and moving most of the data operations to the application level. During the course of the project I've designed and implemented task queueing system (***CAST***) that allowed asynchronous processing of users' requests. As of Q1 2016 CAST processed $9 * 10^9$ tasks and is being deprecated in favor of Hermes system which I also designed.

Technologies[1]: Gearmand, Oracle 10g & 11g, PHP and C

Education

2009–2013 **Bachelor of Science (B.Sc.)**
Poznan University of Technology, Computer Science, Faculty of Computing

Thesis: Webpage performance measurement system

Bachelor's Thesis project goal was to measure end-to-end web pages latency (full DOM rendering) using headless browser engine from many distinct Internet locations.

Technologies: Java 7, Guice, Tomcat, Phantom.js, YSlow and Node.js

Activities

During my free time, I enjoy listening to live music, watching TV shows and traveling to distant locations. As an enterpreneur soul I socialize with people a lot and engage in various communities like empowerment programmes, conferences, meetups and startup weekends as as a mentor. Occasionally I give public talks on various topics and help organize meetups in the community.

I hereby agree for using the personal data included in my job application as required by the recruiting process.

[1]Selected new technologies over the past projects