MICHAŁ ŻYŁOWSKI

Cloud and Software Engeenier,
Open Source philosophy beliver

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EDUCATION

Gdańsk University of Technology, Faculty of Electronics, Telecommunications and Informatics:
2012 – 2016 Course: Informatics, full-time, engineering degree studies
2016 – 2017 Course: Informatics, full-time, master degree studies

Zespół Szkół Technicznych in Grudziądz:
2007 – 2011 Course: Computer Science

LANGUAGE SKILLS

- Polish ★★★★★
- English ★★★☆☆

LINKS

- Github profile
- Linkedin profile
- Homepage

EMPLOYMENT HISTORY

05.2015 – *now*: Intel Corporation as Software Engineering Intern
2014 – 05.2015: Freelancer – preparing simple web services for clients
2009 – 2014: Private lessons, tutoring – mentoring and teaching for other students

CERTIFICATES & DIPLOMAS:

08.2011 – Certificate of competences: diploma of technician IT
06.2013 – "ABC of business management" certificate
02.2016 – Engineering studies diploma
07.2016 – Linux Troubleshooting course performed by Hewlett Packard Enterprise

TOP LANGUAGES & TECHNOLOGIES

Programming Languages:

Go lang:	★★★★☆	Python:	★★★★☆
C/C++:	★★★☆☆	Ansible:	★★★☆☆
C#:	★★★☆☆	Bash:	★★★★☆
PHP:	★★★★☆	SQL:	★★★★☆
Angular JS:	★★☆☆☆		

Cloud technologies:

Kubernetes:	★★★★★	Docker:	★★★★★
Mesos:	★★★★★	rkt:	★★★★★
Openstack:	★★☆☆☆		

Other stuff:

Scrum:	★★★★☆	Github, Git	★★★★★
Jenkins:	★★★★☆	Mentoring:	★★★★☆

TOP SKILLS

- Programming and software development. Knowledge of OOP.
- Understanding Test Driven Development technique.
- Work using agile methodologies (Scrum, Kanban).
- Understanding concept of continuous integration/continuous delivery and experience in Jenkins usage and Jenkins plugins.
- Webmastering (HTML+CSS, PHP5, Node.js, Angular JS, jQuery).
- Understanding relational and non-relational databases techniques, knowledge of Maria DB, PostgreSQL, MSSQL and Mongo DB.
- Deploying production clusters (Mesos, Kubernetes).
- Using containers solutions: Docker, rkt. Writing dockerfiles, running, debugging, deploying docker registry etc.
- Experienced in cooperation and collaboration with community.
- Preparing cluster monitoring stacks.

PROFESSIONALL INTRESTS

Public and private clouds, clusters, cloud computing, big data, parallelization, volunteering grid computing, containers, virtualization.

HOBBY

Geocaching, astronomy, ice skating, opera, climbing, mountains.

PROJECTS

Preparing reservation and monitoring system in data center

My Role: Designing new lab infrastructure and preparing dockerfiles with services.
Description: When new ~50 servers arrived to our DC I was responsible for plugging them into existing infrastructure. Entire lab had system for reservation. We decided to switch everything to docker containers. I was responsible for preparing dockerfiles with phpIPAM, zabbix, dhcp, dnsmasq, etc.

Serenity (developing plugin for Mesos)

My Role: Preparing workloads for tests and demos. Validation of solution.
Description: Serenity is plugin for Mesos. Serenity improves scheduling mechanism and resources utilization mechanism. I was responsible for simulating real user and network traffic. Technology stack: Stressing Wikimedia (deployed on Mesos) by the gatling stress tool. Also in this project I helped to decrease time needed to run Mesos oversubscription tests by preparing scripts (ansible + python) for automated tests execution and results collection.
Links: Serenity on Github

Rkt benchmarking

My Role: Comparison of rkt flavors. Preparing CI for benchmarking rkt flavors every day.
Description: Rkt is alternative for docker created by CoreOS company. Rkt-monitor is simple golang app for measuring performance of entire solution. I made some fixes for rkt-monitor and I discovered performance issue. Also I prepared CI solution (basing on Jenkins and my own python scripts) for running measurements daily.
Links: Example of Contribution, Discovered issue

Kubernetes e2e testing & kubernetes deployment (Kargo)

My Role: Representing my team in Kargo community, deploying and configuring Kubernetes clusters for e2e purposes.
Description: Kargo is a set of ansibles related with installing Kubernetes. My team was interested running kubernetes e2e tests with docker and rkt containerizers on bare metal. We were responsible for solving issues and tests in kubernetes one by one. It was important for us to redeploy k8s clusters easy and fast, so I was also involved in Kargo development.
Links: Pull Request to Kargo, Issue submitted to Kargo, k8s e2e test fix

CRI-O + Kubernetes POC and technical analysis

My Role: Run multinode kubernetes cluster with ocid (cri-o) as backend.
Description: With friend from my team I tried to change k8s backend from docker to cri-o. We found some issues to fix in the cri-o part. After merging PR's related with them I run e2e k8s conformance tests, to check how many features have to be fixed and re-implemented in cri-o.
Links: Example of Contribution, Result of the POC

Engineering diploma project - A programming RTS online game [in polish]

My Role: Develop front-end part of web service related with engineering studies.
Description: I was responsible for developing front-end part of Web service related with my engineering degree. Technology stack: AngularJS, Grunt. Backend: node.js.
Links: Diploma document, Repo – Web Service, Repo – the Game

Master thesis – Mesos schedulers comparison [in polish]

My Role: Describe and benchmark some of Mesos schedulers.
Description: Project related to master's degree is implemented individually. Project is still in progress. I deployed Mesos cluster in docker containers on Gdańsk University of Technology. The next step will be write a go lang application related with cluster benchmarking. Also I prepared my own docker images with Mesos. Dockerfiles can be cloned from mesos-dockerized organization from Github.
Links: Mesos-dockerized organization [WIP], Master thesis repo [WIP]

Voluntary: Opencaching network – opencaching.pl

My Role: Code developer, VPS Admin
Description: Opencaching is open source implementation of geocaching.com. The first version of opencaching was released in 2006 and a lot of people contributed to them. Code is written in PHP. The idea related to the project is to connect all opencaching national sites. For now our copy of code is installed in Poland, Netherlands, Romania and United Kingdom. By developing opencaching I experienced work with heavy database on production and huge load of users.
Links: Repository, Code on production, Example of Contribution