

I love Lisp and Smalltalk! I enjoy Prolog as well

Dr. Yuriy Tymchuk

Senior Software Engineer



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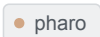
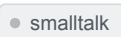
✉ yuriy.tymchuk@swisscom.com • 🌐 yuriy.tymch.uk • 🐦 yuriy_tymchuk • 🗨️ Uko

I'm a software engineer / computer scientist and a hacker in general, who loves to solve challenging problems. Programming is the main activity that allows me to think, create, and bring my solutions to life.

Public Achievements

QualityAssistant: My software-quality tool with a live feedback is integrated into the latest version of Pharo IDE. Expected usage: 2000 developers; 30 commercial companies; 20 universities.

Live 3D visualizations video [youtu.be/CuimMwuZiGA]: was used in a couple of dozen presentations for demonstrating the idea of live programming.

StackOverflow: Owner of  (10 owners in total) and  (3 owners in total) badges.

Employment

Swisscom as *Senior Big Data Engineer (+ Scrum Master till Jul 2019)* *Dec 2017 – ongoing*




Development of an ETL application, a client-facing web app, maintenance of a CI/DC infrastructure. Assistance on various data sourcing and analysis projects. Refactoring of a few systems. Performed a migration from AngularJS to Angular 10. Reduced the deployment time from one human/day to a few minutes with minimum interactions. Saved a few dying features and operational failures. Won an internal startup-ish competition *aka* Kickbox.

Universität Bern as *Research Assistant*

Jan 2016 – Nov 2017

Research on embedding quality assistance into development workflow. Maintenance of the group's git server. I've invented a 3D visualization that allows detection of defects in software quality evolution. Teaching.

Ukrainian Catholic University as *Lecturer & Strategic Consultant*

Jun 2015 – ongoing

Planning the first year for the bachelor computer science program and a long term strategy for the Faculty of Applied Sciences. Teaching advanced programming for the data science master students.

Università della Svizzera Italiana as *Doctoral Assistant*

Oct 2013 – Dec 2015

Modeling of developer collaboration, based on the data mined from software repository. Research on code quality, development of ViDI code review tool and QualityAssistant static analyzer. Teaching.

Innocode as *Software engineer*

Apr 2013 – Sep 2013

Pre-project research concerning a leanbusiness.no web-application. Development of Relink project in Ruby on Rails. Increased performance of the team by introducing a git-flow strategy development strategy.

RMoD, Inria as Intern

Jan 2013 – Apr 2013

Research on AST metamodels. Development of FAST: a generic metamodel and symbol resolution algorithm.

Pharo Moose PetitParser

InterLogic as Software engineer

Aug 2012 – Jan 2013

Development of a Java3D applet for ventilation system configuration with a backend in PHP and MySQL.

I've developed a module in Scala which decreased the complexity by an order of magnitude in comparison with Java implementation.

Java Java3D Scala PHP MySQL

Unikernel Team (freelance) as Founder/Leader

Mar 2010 – Aug 2012

Different websites made from scratch. Usually online shops, sometimes web apps with rich frontend.

HTML/CSS PHP CakePHP JavaScript Raphaël JS MySQL

UARNet ISP as Network Administrator

Feb 2009 – Jul 2012

On call assistance, network administration, minor web development.

FreeBSD Linux iptables Oracle SQL PHP Delphi

Education

Ph.D. in Computer Science @ University of Lugano & University of Bern

2013 – 2017

Thesis topic: "Quality-Aware Tooling"

Master of Science @ Ivan Franko National University of Lviv

2012 – 2013

Specialization in Informatics.

Thesis topic: "Extending FAMIX metamodel to generate ASTs for Java and Smalltalk applications"

Bachelor of Science @ Ivan Franko National University of Lviv

2008 – 2012

Specialization in Informatics

Additional Training

Application Security @ Swisscom

2018

SAFe Scrum Master @ Swisscom

2018

Design Science & Design Thinking @ CUSO Winter School

2017

Hands-on Data Analysis with R @ CUSO Seminar

2016

Taming Big Data @ CUSO Winter School

2016

Personal Information

Date of Birth: Aug 11, 1991**Marital Status:** Married**Place of Birth:** Lviv, Ukraine**N^e of children:** 2**Citizenship:** Ukrainian**Swiss Residence Permit:** B

Languages

English: Proficient**Polish (spoken):** Intermediate**Ukrainian:** Native Speaker**Russian (spoken):** Intermediate**Italian:** Basic**German:** Basic

Selected Publications

☺ Besides academic publishing I have a coding blog: <http://uko.codes> (ex code.yuriy.tymch.uk)

The False False Positives of Static Analysis, *Y. Tymchuk*, In Proceedings of IWST'18 (International Workshop on Smalltalk Technologies), 2018.

JIT Feedback: What Experienced Developers Like About Static Analysis, *Y. Tymchuk, M. Ghafari, and O. Nierstrasz*, In Proceedings of the 26th Conference on Program Comprehension, pp. 64–73, ACM, 2018.

Walls, Pillars and Beams: A 3D Decomposition of Quality Anomalies, *Y. Tymchuk, L. Merino, M. Ghafari, and O. Nierstrasz*, In Proceedings of VISSOFT'16 (4th IEEE Working Conference on Software Visualization), pp. 126–135, IEEE, 2016.

Teaching

Ukrainian Catholic University as *Lecturer*

Software Architecture for Data Science in Python
Advanced Programming

Spring 2020
Fall 2016

Universität Bern as *Teaching Assistant*

Compiler Construction
Software Modeling and Analysis

Spring 2017
Fall 2016

Google Summer of Code as *Mentor*

New Collections for Pharo
Advancing in Pharo Code Quality Support
FAST Java Model

2019
2017
2013

Hobby

Hiking picturesque or difficult mountains and reflecting amazing moments of this world with my camera (<https://www.deviantart.com/ukoterpuh>). I own a 3D printer, and I design functional models that I print afterwards (<https://terpuh-labs.com>). Some time ago I was doing Kyokushinkai karate and I'm still following some of the principals I've learned there.

Remarks for Nerds

This cv is written in \LaTeX , versioned with git, hosted on GitHub and built with Travis CI