

TOMASZ ANDEL

PERSONAL INFORMATION

born Legnica in Poland, 25 September 1985
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SHORT SUMMARY

I have over 10 years of experience working on large, complex projects. From image processing algorithms specific to cardiovascular diseases to rapid development in financial systems using functional languages. Moreover i'm interested in performance improvements in SOA and shared library optimizations.

WORK EXPERIENCE

Feb 2018–Present Software Engineer, ZURICH, SWITZERLAND

UBS
(3 years+)

Rapid application development working with risk modeling (R/C++/Python). Heavily working with functional Q language for KDB+, Python applications and C++ codebase for Risk and Investment Banking.

LANGUAGES : PYTHON, K/Q LANGUAGE (KDB+), C/C++ (C++11/14/17, BOOST), R
TOOLS : GIT, VIM, ANACONDA

Jul 2017–Jan 2018 Software Engineer, PARIS, FRANCE

General Electric
(7months)

Healthcare branch of General Electric. Image processing including work around cardiac specific processing algorithms - bullseye construction from segmented myocardium with functional volumes.

LANGUAGES : C/C++ (C++11/14, BOOST, STL, EIGEN, OPENMP, OPENCV, GTEST, GMOCK, X11)
TOOLS : VIM, MERCURIAL, GIT, JENKINS, GDB, VALGRIND

Jan 2012–Jun 2017 Software Engineer, NICE, FRANCE

Amadeus
(5years 6months)

Credit Cards Concealment framework allowing to detect and store credit card numbers in two separate parts (PCIDSS Standard). Technical Lead for R&D Teams. Focusing on performance improvements, profiling tools and architectural work.

LANGUAGES : C/C++ (BOOST, STL, GTEST, GMOCK), PYTHON, IBM TPF ASSEMBLER, BASH, JAVASCRIPT
TOOLS : VIM, MERCURIAL, GIT, JENKINS, GDB, VALGRIND, CALLGRIND

Jun 2010–Dec 2011 Software Engineer, WROCLAW, POLAND

*Nokia Solutions
and Networks*
(1year 6months)

Base Transceiver Station engineer, developer of LTE technology in Multimode BTS. State machine for BTS startup phase in C++. I was part of a team working at Greenfield project for new generation of Base Transceiver Station hardware.

LANGUAGES : C/C++ (BOOST, STL), PYTHON, C#, UML, XML
TOOLS : VIM, SVN, JENKINS, STARUML, L^AT_EX, GDB, GOOGLETEST

Sep 2009–May 2010 Software Engineer, WROCLAW, POLAND

*Techland
(9months)*

Special effects programmer and extensively on game logic for player and vehicle physics for such game titles like Call of Juarez and Dead Island. Programming control panel devices and working with musicians to design and develop sound engine for level design engineers. Designed and developed artificial intelligence helicopter movements on B-Splines.

LANGUAGES : C/C++ (BOOST, STL), C#, 3DMax MAXSCRIPT, XML
TOOLS : VIM, INCREDIBUILD, PERFORCE, SVN, MAXIMA, VALGRIND

Feb 2008–May 2009 Fortran Engineer, WROCLAW, POLAND

*Fundamental
Problems of
Technology,
Institute of Physics
(1year 4months)*

Member of team working in Wroclaw Supercomputer Center (www.wcss.wroc.pl). Electron quantum dot computing framework research and development.

LANGUAGES : FORTRAN 95/2003, MPI 2.0, BASH, LISP
TOOLS : GAP, MAXIMA, GIT, INTEL@MPI BENCHMARKS, MPI-CHECK, VIM, L^AT_EX
Reference: PhD. Jacek GRUBER · jacek.gruber@pwr.wroc.pl,
Reference: PhD. Janusz ANDRZEJEWSKI · janusz.andrzejewski@pwr.wroc.pl · www.if.pwr.wroc.pl/~andjan

EDUCATION

2014-open Oxford University, UK

Master of Science

Major: Mathematics · Minor: Financial Mathematics
Interests: *Periodicity in Quasicrystals and its application in non-ergodic economic systems*

2005-2010 Wroclaw University of Technology, Poland

Master of Science

Major: Informatics · Minor: Software Engineering
Thesis: *Theoretical model of gravitational computing*
Advisors: PhD. Arkadiusz LIBER · arkadiusz.liber@pwr.wroc.pl

2007-2012 Wroclaw University of Technology, Poland

Master of Science

Major: Mathematics
Interests: *Abel groups distribution and its correlation with Riemann Zeta function.*

2007-2010 Wroclaw University, Poland

Bachelor of Science

Major: Astronomy · Minor: Astrophysics

PROGRAMMING SKILLS

Programming

Q/KDB+, R, F#, ERLANG, OCAML, FORTRAN, C#, ASSEMBLER x86, PYTHON, JAVASCRIPT, C/C++ (BOOST, STL, MPI, OPENGL, OPENMP, OPENCV)

OTHER SKILLS

Development

CACHING TECHNOLOGIES, GREENFIELD DEVELOPMENT, FUNCTIONAL PROGRAMMING DESIGN, EXTREME PROGRAMMING, MULTI-THREADING/CONCURRENCY, DISTRIBUTED COMPUTING, MACHINE LEARNING, NEURAL NETWORKS, GENETIC ALGORITHMS, DYNAMIC PROGRAMMING, LINEAR PROGRAMMING

OTHER INFORMATION

Languages

POLISH · Mothertongue
ENGLISH · Fluent

Interests

Rocket Engines · Space Technology · Astronomy · Chess · Mathematics · Physics · High Frequency Trading · Low Latency Systems · Poker · Freediving