

Marcin Aleksander Nowak

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Homepage <http://resume.marcinnowak.info>
Nationality Polish

Expertise:

Software Architecture Hoisting, Analysis, Evaluation, Patterns and Styles, ATAM, CBAM, Requirements and Decisions Management, 4+1 Views, ADD, Twin Peaks Model, ISO 42010,
Coding Java, .NET, C/C++/C#, Ruby, Python, R, Groovy, JavaScript, Bash,
Toolchain J2EE, RAML, Docker, Maven, Jenkins, GCP, AWS, SonarQube, VS
Software Engineering TDD, BDD, Code & Process metrics, Static and dynamic verification, CI,
Development Process Agile, RUP, TFS, Scrum, Kanban,
Modeling XML/XSD, JSON/JsonSchema, UML
Web Apache, nginx, Node.JS, Backbone.JS, Marionette, Angular, RoR, Play,
Operating Systems Linux, OSX, Windows, Android,
Physics Laser Optics, Modeling of Physical and Chemical processes,
Certifications SEI Software Architecture Professional, MS 70-529, MS 70-536, OMG OECB Fundamental, ISTQB Tester

Professional interests:

Full-stack and back-end solutions, IoT, (micro-) service, cloud, serverless architectures, machine learning, big data

Academic path:

Mar. 2009 – Sep. 2014 Ph.D. - Computer Science at University of Lugano, Switzerland
Collaborative architecture decisions modeling, <https://goo.gl/QqTBqy>
Software Architecture Warehouse <https://goo.gl/2LFSQ0>
Oct. 2004 – Jul. 2007 M.Sc. - Graduate Studies in Physics at University of Hannover, Germany
Laser spectroscopy of ultracold SO₂ molecules <http://goo.gl/k8bhlt>
Sep. 2001 – Jun. 2004 B.Sc. - Physics at University of Poznań, Poland

Selected Publications:

Marcin Nowak, Cesare Pautasso "Team Situational Awareness and Architectural Decision Making with the Software Architecture Warehouse" in Proceedings of the European Conference on Software Architecture (ECSA) 2013, Montpellier, France

Marcin Nowak and Cesare Pautasso "Collaborative Design with the Software Architecture Warehouse" At SATURN Conference, Carnegie Mellon, Software Engineering Institute, San Fransisco, CA, 2011

Professional Path:

- Sept 2018 - now Sonyx Software (Zurich, Switzerland)
Self-employment – cryptocurrency trading, intelligent home, IoT
(algorithmic trading, private cloud, MQTT, Arduino, ESP8266/32)
- Nov. 2015 – Sept. 2018 swissQuant – www.swissquant.com (Zurich, Switzerland)
Maintained and extended java core component for the investment portfolio optimization. Modeled and implemented component’s RESTful API.
(Mixed-Integer Quadratic Problem optimization, BDD, REST, Docker)
- Nov. 2014 – Nov. 2015 Roche Diagnostics International – roche.com (Rotkreuz, Switzerland)
Designed of testing architecture, analyzed existing software architecture for the Cobas Liat point of care molecular diagnostics instrument.
(MS VS, BDD, TDD, EA, UI testing, TFS)
- Mar. 2009 – Sept. 2014 University of Lugano – www.usi.ch (Lugano, Switzerland)
Research and Teaching assistant for Bachelor (Software Atelier – Web Technologies) and Master (Software Architecture and Design) courses.
Design, coordination, and development of SAW rich-client web application (RoR, Backbone.JS, Marionette)
- Jan. 2008 – Feb. 2009 Zühlke – www.zuehlke.com (Hannover, Frankfurt, Vienna)
Supported Software Engineers in software design and development process, architect and analyst, Microsoft .NET technologies specialist.
(.NET, TFS, Biztalk)
- Aug. 2007 – Dec. 2007 Sonyx – www.sonyx.net (Bremen, Niedersachsen, Germany)
Self-employed freelancer working with heavy and car industry, consulting on software architecture analysis, design and implementation.
(C# .NET, C++, Design Patterns)
- Mar. 2005 – Aug. 2007 IKN – www.ikn.eu (Neustadt am Rübenberge, Hannover, Germany)
Developed of the XML data input/output system, static code analyst of the clinker processing line (C# .NET, XML, XSLT, XSD)
- Dec. 2006 Lafot & UniColor International – www.lafot.com (Beijing, China)
Short time contract on the implementation of windows+linux color management and image processing system. (C++, QT, .NET)
- Jan. 2006 – Apr. 2006 IKN & PSP – www.pspeng.cz (Prerov, Czech Republic)
Jun. 2005 – Aug. 2005 Refactored and improved of clinker line model (Borland C++, Unix + windows system engineering, wiki and revision control system)
- Jan. 2000 – Feb. 2005 Lafot – www.lafot.com (Puszczykowo, Poznan, Poland)
Medium scale MS VisualStudio .NET (C++) based image processing project manager & co-developer, build and code versioning controller
Developed embedded QT framework based Linux solution interfacing with a distributed network of microcontrollers, Linux kernel extensions, embedded client-server application development

Language skills:

Polish	native
English	proficient (C2)
German	fluent (B2/C1)
Italian	basic (B1)

Personal points of interest:

Bitcoin trading, Alpine skiing, mountaineering, snowshoeing, and hiking, Motorcycle touring, IoT home automation and robotics, Acrylic painting