

Certified Bitcoin and Ethereum Professional, Technical Leader, Architect, Senior Java Software Engineer with strong hands-on experience. Worked in financial/banking, payments, telco, pharmacy, integration, mobile, gaming and start-up projects. Blockchain and cryptocurrencies technology enthusiast.

Marcin Zduniak

Location: Gibraltar (EU)
Nationality: Polish
Phone: +350 540 36 529
Email: marcin@zduniak.com
Skype: marcin.zduniak



Quick summary

Experienced blockchain consultant with strong technical background especially in Java-related back-end technologies (JavaEE multitier distributed and highly concurrent systems, cloud computing, mobile systems as well as systems integration and low-level protocols designs) with certificate "Sun Certified Programmer for the Java" but also with hands-on experience in C#/.NET, JavaScript, Ruby on Rails and PHP. Has deep understanding of integration techniques (distributed systems and cross-platforms local communication) and IT system architectures.

Project experience:

Blockchain & cryptocurrencies consulting projects, 10.2014 – present

Colubris.PRO – cryptocurrencies 2.0 startup, offers bespoke blockchain products in SaaS model, easy to use and secure API on top of the Bitcoin blockchain and Ethereum technical consultancy. Exploring different technological approaches including Ripple, Stellar, Hyperledger, Corda.

Some of the projects I was working on a various stage of development (initial concepts, proof of concepts, commercial projects):

- technical advising in few ICOs, ICO smart contracts development and audit
- eMoney, crypto tokens issuance (Solidity contract, C# integration layer, exploring migration to Hyperledger Fabric)
- fiat-cryptocurrency exchange (technical consultancy related to Ethereum integration, handling of hardforks, matching engine design, general security and performance improvement)
- commercial data distribution markets
- derivatives markets and binary options contracts trading
- P2P lending platform (technological feasibility study)
- provably fair gaming in Bitcoin (Java8 server-side implementation)
- lottery contracts in Ethereum (Solidity and JavaScript coding)
- algo trading on cryptotokens (PHP integration with exchange and implementation of trading algorithms)
- IM messaging bot and blockchain integration (Java8 integration with Viber IM platform)
- Blockchain explorer (BitcoinJ and Play Framework using Java8)

I am responsible for:

- technological expertise in: cryptocurrencies, cryptography, blockchain implementations, software development, REST and WebServices API development
- designing system, choosing components and technologies
- implementation of system scalability and HA
- actual development of the technical product, underlying protocols and API

Key Technology used:

Java8, BitcoinJ, Ethereum, Solidity, C#, ASP.NET, MongoDB, Meteor, AngularJS, Play Framework, Spring Framework, Spring Boot, Vaadin, Go language, Kotlin, Azure Cloud.

Team Leader, Senior Software Developer & Architect, 01.2013 – present

Intelligent Payments, Gibraltar – international payments gateway provider, PCI DSS Level 1 compliant, integrated with above hundred payment solutions from all parts of the world. Among customers top gaming brands.

As Team Leader, Architect and Senior Software Developer I am responsible for:

- hands-on software development and designing systems architecture
- leading development teams in Gibraltar, Malta, Romania, Spain and outsourced IT resources
- estimating development efforts and ensuring smooth implementation process
- integrating system with payment solutions, anti-money laundering and liability risk mitigation subsystems
- implementing payment solutions tailored for banking industry and mobile payments
- working on the brand new bespoke payment products
- working with the Enterprise Integration Patterns and Design Patterns
- security improvements on the architectural and implementation level (OWASP, SSL protocol stacks, hashing)
- improving products' maintainability and performance
- improving performance of the existing system (eg. by introducing NoSQL/Redis where it is applicable, effective multithreaded processing)
- working closely with Product Owners on feasibility study, and technological constraints for the new products
- improving testability and quality of the existing system (introducing QA tools like: SonarQube, PMD, JaCoCo, FindBugs)
- assisting with Europe customers roll-outs
- working closely with the firm's customers (on-site and remotely), digesting requirements, translating them into technical architecture, pre-sales assistance, work estimation

Key Technology used:

Spring Framework (including Spring Data, Spring Boot), Apache Camel, OSGi/Karaf, JBoss Fuse ESB, MyBatis, JMS, REST, SOAP, WSDL, XSD, load balancing, cloud computing, HA, failover, OpenShift, Tomcat, Redis, Oracle 11g, Freemarker, JSP, Struts2, Maven, Eclipse STS, Jenkins, Git, SCRUM & KANBAN, JIRA, Confluence.

Senior Java Software Engineer, 08.2012 – 12.2012

ICON plc, Ireland – One of the Top10 worldwide clinical research organization (CRO). Involved mainly as back-end and large-scale data integration technologies architect and engineer and developer of existing software products.

As Senior Java Software Engineer I was responsible for:

- working in a Scrum team as back-end, integration technologies, Web Services and Java engineer responsible also for architecture
- integrating existing services with external customer's services (on-line and batch processing, ETL processes)
- taking part in architectural migration of existing software from multi-instance to multi-tenant architecture
- implementing data structures (JPA, extensive SQL and PL/SQL) and the business logic

around them (REST services, SOA)

- following strict QA rules (high code coverage, TDD, source code standards, precise documentation in Confluence/JIRA) with technologies like: JUnit, Mockito, FindBugs, Checkstyle, Hamcrest, Robot Framework, Hudson/Jenkins (continuous integration).

Key Technology used:

Spring Framework (including Spring Integration, Batch, REST, MVC), Hibernate (including JPA and Envers), JMS, Google Guava, JSON, XSD, JBoss, Tomcat, Jetty, MySQL, AJAX, ExtJS, Maven, Spring Tool Suite/Eclipse, ExtJS, SVN, Linux.

IT Director, Technical Project Manager and Senior J2EE Developer, 04.2009 – 07.2012

TELEO.pl (formerly KillBill.pl), Polish startup in telco industry - Internet service for optimizing telco billings (searching for savings in billings) for business and individual customers. Initially involved as Developer, System Architect and external IT consultant and adviser to the founder, later promoted to technical managerial position.

As IT Director, Technical Project Manager and Senior J2EE Developer I was responsible for:

- managing agile team of software engineers and architects (TDD, high code coverage)
- preparation of the highly scalable and fault tolerant distributed architecture based on cloud computing techniques (AWS) and mix of SQL and NoSQL storages
- maintaining consistent technical architecture across many vendors
- verifying software quality delivered by outsourced software houses (QA)
- assisting R&D team with analysis and requirements preparation
- supervising and mentoring team of Technical PMs and server administrators
- created first working prototype of the system
- developing integration code (Java EE) and some of the core services
- budgeting and costs controlling
- scheduling and deadline achieving
- negotiating contracts with external software houses (some of the development were outsourced)
- interviewing PMs, software developers and server administrators
- reporting directly to CEO

Key Technology used:

Java EE, Spring Framework, MongoDB, RabbitMQ, JMS, CouchDB, OSGi, Scala, Grails, Drools, Hudson and TeamCity (continuous integration), Linux, MySQL, Servlets, AJAX, jQuery, Maven, Eclipse, Agile Development, Jetty.

Technical Advisor, Freelancer, 11.2008 – 05.2009

Working as a self entrepreneur and freelancer for many companies from Poland. Advising in terms of technology (mainly utilization of advanced mobile and server technologies), consulting, coordinating work of developers on the software projects.

Key Technology used:

Java and J2EE, Ruby on Rails, integration with SMS gateways, MySQL, J2ME, Android, BlackBerry.

Ruby on Rails Software Developer, Contractor, 05.2008 – 11.2008

femory.de - German media (social network) startup company that created website with videos and photos albums sharing service.

As Ruby on Rails Software Developer I was responsible for:

- Proposing architectural technical solutions for given requirements and discussing it with the rest of distributed team of developers (project was lead mainly remotely with team members in few locations)
- Developing and testing RoR and SQL code
- Test-driven development (TDD)

Key Technology used:

Ruby on Rails, NetBeans, REST, MySQL, external video converters.

Architect and Senior J2EE Software Developer, Contractor, 10.2007 – 04.2008

DekaBank – German savings bank with investment products for other banks.

I was working as an external consultant engaged by the Consileon company (www.consileon.de) on commission calculation and payment system.

As Architect and Senior J2EE Software Developer I was responsible for:

- Creating technical architecture of the whole product (few interconnected components)
- Developing back-end for the system
- Extending existing front-end applications
- Mentoring other team members in more complex technical issues

Key Technology used:

ILOG JRules, BEA WebLogic 8.1 and 9.2, JBoss Server, Oracle 10g, JMS, EJB, Hibernate, Spring Framework, Eclipse Business Intelligence and Reporting Tools, Canoo UltraLightClient.

Architect and Senior J2EE Software Developer, Contractor, 07.2007 – 09.2007

DAB bank – one of the biggest German internet bank.

I was working as an external consultant engaged by the Consileon company (www.consileon.de) for creating dedicated messages-based integration system for extremely reliable, highly-available and highly-loaded applications with sophisticated transactions management.

As Architect and Senior J2EE Software Developer I was responsible for:

- Creating technical basis and architecture of the system
- Developing back-end implementation for the system (partially in Java and partially in PL/SQL)
- Cooperating with the rest of the technical team in bank and other consultants

Key Technology used:

low-level threading, Oracle 10g, Sun Application Server, ATG Dynamo, Spring Framework, JBoss, J2EE, JTA.

Architect and Senior J2EE and J2ME Software Developer, Freelancer, 02.2007 – 07.2007

Canadian-based gaming company (name can't be disclosed due to strict NDA).

Company for which I was working for was creating internet-based mobile phones gaming service. Remote working.

As Architect and Senior J2EE Software Developer I was responsible for:

- Creating technical architecture of the server-part and communication channels between mobile and server-tier
- Developing back-end implementation for the system and DB schema structure (PostgreSQL)

- Integrating system with external payment service
- Coordinating work delivered by team of mobile (J2ME) Software Developers
- Assessing code delivered by outsourced India-based software house at the first stage of the project

Key Technology used:

Linux, J2EE, Tomcat, JSP, Hibernate/JPA, PostgreSQL, Ehcache, SQL, Spring Framework, Struts2, MySQL, ESB / Mule, integration with credit cards suppliers and GSM operators based on WebServices and custom protocols.

J2EE and J2ME Designer and Developer, 05.2005 – 07.2007

NaviExpert – GPS navigation system for regular mobile phones.

As J2EE and J2ME Designer and Developer I was responsible for:

- Designing, developing and testing software for mobile phones (J2ME-based and BlackBerry)
- Multi-threading and highly concurrent programming (both on server-side and on client-side)
- Creation of the solution for clustering and replication of DB servers
- Creation of the network communication protocol for efficient use on mobile phones (with build-in compression and cryptographical encryption features)

Key Technology used:

J2ME, J2EE, Java NI/O, JDO, MySQL, XML, XPath, XSLT, CruiseControl, SSL, Java build-in multi-threading.

Consultant, Technical analyst, designer and developer, 11.2006 – 12.2006

Car engines manufacturer, customer of Business Consulting Center, one of the biggest German car engines manufacturer (name can not be publicly disclosed).

I was engaged in this consulting project by Business Consulting Center (one of biggest SAP integrator in Poland). The aim of the project was to integration of bar-codes reading software on production lines with SAP R/3.

As Technical analyst, designer and developer I was responsible for:

- gathering customer's requirements (direct meetings with the customer)
- proposing technical architecture and integration processes
- developing software in ABAP and J2EE that fulfill the requirements
- production release of the created solution

Key Technology used:

SAP ABAP, SAP JCo, Tomcat, iBatis, MS SQL Server, Quartz, Spring Framework.

SAP WebDynpro and J2EE Designer and Developer, 03.2006 – 12.2006

Dutch company, customer of Business Consulting Center, which is providing services in quality management (name can not be publicly disclosed).

I was engaged in this consulting project by Business Consulting Center (one of biggest SAP integrator in Poland). The aim of the project was to introduce automatic monitoring and statistical data analysis of the production lines.

As SAP WebDynpro and J2EE Designer and Developer I was responsible for:

- Creating software based on the requirements documentation from the customer

- Refactoring existing parts of the code that was not in concordance with a standards and good programming practices
- Assisting customer during testing process
- Production release

Key Technology used:

J2EE, Servlets, SAP WAS, WebDynpro, MS SQL Server, DWR AJAX, JSP, JavaScript.

Java Architect and Developer, Contractor, 07.2006 – 11.2006

Econsulting.pl – Polish consulting company specialized in systems integration.

The aim of the project was to create application and XML format specification for building questionnaires for mass usage.

As Java Architect and Developer I was responsible for:

- gathering requirements from the customer
- creating requirements documentation
- proposing architecture and technical solution
- Java code development
- presenting solution to the customer

Key Technology used:

XML Schema, XMLBeans, JGoodies, Launch4j, Spring Framework, OneJar.

Team Leader, Senior Java Software Developer, 11.2005 – 12.2006

Business Consulting Center - one of biggest SAP integrator in Poland with customers in many counties.

The aim of the project was to create Server system that allows SAP R/3 servers to communicate with devices like fax and GSM/SMS modems (for sending alert and business messages).

As Team Leader, Senior Java Software Developer I was responsible for:

- supervising team of 5 junior developers, one architect and one analyst
- Advising architect with preparation of best technical solutions to our task
- Developing some core parts of the system (eg. asynchronous messages passing subsystem, communication with SMS external devices, transactional communication with the database)

Key Technologies used:

Java EE, SAP JCo, SAPconnect, JMS, JMX, Acegi, Spring Framework, WebServices, Linux, PostgreSQL, ANT

Team Leader, J2EE Designer and Developer, 07.2005 – 11.2005

COMARCH – one of the biggest IT integrator working in Poland and international markets.

The aim of project was to choose new web framework and develop programming practices for new products that will be created by COMARCH basing on our results. The first product we were involved in (pilot project) was system for managing insurance products, its distribution and operation (basing to some extend on existing Delphi-based product).

As Team Leader, J2EE Designer and Developer I was responsible for:

- supervising team of 5 developers
- choosing right Java web framework together with the team basing on our experiments
- preparation of the system architecture

- technology excellence (mentoring junior developers, development of good programming practices)

Key Technology used:

J2EE, Oracle ADF, Oracle 10g, Oracle AS, IBM WebSphere, JDeveloper, LDAP, TopLink, Spring Framework.

Education:

Date	Scope	Provider/location
expected 2018	MSc in Digital Currency	University of Nicosia, Cyprus http://digitalcurrency.unic.ac.cy
2015	Bitcoin and Cryptocurrency Technologies	Princeton University
2014	Cryptography	Stanford University
2014	Foundations of Business Strategy	University of Virginia
2014	Critical Perspectives on Management	IE Business School
2007	Master of Science studiem (A grade)	Poznan University of Technology Department of Computer Science and Management Discipline: Software Engineering
2006	Bachelor of Science degree (A grade)	Poznan University of Technology Department of Computer Science and Management Computer Science
2005	"Presentation techniques" training	DOOR – Training & Consulting, Poznan
2005	SAP: Exchange Infrastructure Foundations (design, configuration and runtime)	Business Consulting Center, Poznań

Professional Certification:

Date	Scope	Provider/location
2017	Certified Ethereum Developer	B9lab http://academy.b9lab.com/courses/B9lab/current-ethereum-developer-course
2017	IBM Blockchain for developers (Hyperledger Fabric)	https://developer.ibm.com/courses/all-courses/blockchain-for-developers/
2017	MOOC: Introduction to Digital Currencies – 98%	University of Nicosia, Cyprus http://digitalcurrency.unic.ac.cy/free-introductory-mooc/ https://goo.gl/Zp6EtC
2016	Certified Bitcoin Professional – 96%	CryptoCurrency Certification Consortium (C4) https://cryptoconsortium.org/lookup/905cdc
2016	JDK 8: Functional programming: Lambdas and Streams	Oracle
2014	PCI Awareness	PCI Security Standards Council
2013	Scrum Master Certificate - 98%	International Scrum Institute http://goo.gl/68UGpE
2007	Green Belt Certificate –	www.javablackbelt.com/UserView.wva?userId=375

	including: Java, J2ME, SQL and others	8190
2006	Certificate: Development Consultant SAP NetWeaver '04 - Web Application Development Focus JAVA EE - 86%	SAP Poland
2006	Certificate: Sun Certified Programmer for the Java 2 Platform, Standard Edition 5.0 - 90%	Sun Microsystems Poland

Skills:

Languages: Java SE (8, 7, 6), Java EE, Go Lang, Ruby on Rails, PHP, Scala, C/C++, C#, JavaScript, Groovy, AspectJ, ABAP.

Databases: Oracle, MySQL, PostgreSQL, MS SQL, NoSQL (CouchDB, MongoDB, Neo4j).

Servers: Apache Tomcat, Jetty, JBoss, SAP WAS, WebLogic.

DB frameworks: Hibernate, JPA, EJB, iBatis, Oracle TopLink,

Integration: Spring Integration, Spring Batch, JMS, RabbitMQ, ActiveMQ, REST, RMI, EJB, SOAP, JavaSpaces, JMX.

QA: Selenium, JUnit, JMeter, Mockito, Hudson/Jenkins CI, Cobertura, FindBugs, Checkstyle, Robot Framework.

PM: JIRA, Confluence, Wrike, Microsoft Project, Mantis, Redmine.

IDE: Eclipse STS, IntelliJ IDEA, SAP NWDI, NetBeans.

View frameworks: GWT, Spring MVC, Struts 2, JSP, JSF, ExtJS, jQuery.

Methodologies: Agile (Scrum and Kanban), full SDLC.

Source Control: Subversion, GIT, CVS.

Operating Systems: Linux, Windows.