

# Mr Krzysztof Stasiak

[kris-lab.com](http://kris-lab.com)

Mobile: **+447 526 568 409**

Location: **Barcelona, Spain**

e-mail: [krzysztof.piotr.stasiak@gmail.com](mailto:krzysztof.piotr.stasiak@gmail.com)

Visionary and goal-oriented IT senior executive with **over 15 years** of demonstrated experience in planning, developing, and implementing the cutting edge information solutions addressing business opportunities. Developed strategic plans for implementation and operation of clients' services, product support, quality assurance, and training. Initiated and enforced strict budget controlling tools addressing companies' needs and supporting development. Adept at crisis management, trouble-shooting and problem-solving. Advanced positive company image through public presentations. Experienced in joint application development, benchmarking, capacity planning, projects and resource management, cross-functional team training.

## Key strengths and achievements

- Well organized, hard-working, fast learner, rapidly adapting, open minded, creative thinker, problem solver
- In love with technology, coding, distributed computing, artificial intelligence
- Easily switching between environments, programming languages and technologies.
- Expertise knowledge of commercial solutions like ERP, DMS, Workflow platforms and social media networks
- Works well either leading or being part of a team; Self-motivated and capable of working on several tasks at once.
- **Always striving to learn, research, prototype, prove the concepts and deliver the solutions & architectures**

## Main skills

<b>Programming</b>	<ul style="list-style-type: none"><li>• Very good <b>PHP5+</b></li><li>• Very good <b>Puppet</b>, good <b>Ruby</b>,</li><li>• Very good Linux/OSX <b>Bash scripting</b></li><li>• Very good <b>Golang</b></li><li>• Very good knowledge in <b>JavaScript (node.js)</b></li><li>• Good knowledge in <b>Terraform</b></li><li>• Working knowledge in C/C++</li><li>• Working knowledge in Python</li><li>• Working knowledge in Objective-C</li><li>• <b>Full OOP, TDD, MVC</b></li></ul>
<b>Computer Vision, Media, Graphics, Communication</b>	<ul style="list-style-type: none"><li>• Good knowledge of Gstreamer, OMX, FFmpeg</li><li>• Good knowledge of OpenVX, CUDA, OpenGL, OpenCV</li><li>• Good knowledge of Janus-gateway (RTP, WebRTC)</li><li>• Good knowledge of machine learning and AI using TensorFlow</li></ul>
<b>Web related technologies</b>	<ul style="list-style-type: none"><li>• Angular, Backbone.js, Underscore.js, Socket.io, SockJS, CoffeeScript</li><li>• CM (symfony based), Zend, Yii, CodeIgniter, Beego</li><li>• WebGL, WebVR, WebRTC, SDP, RTP, RTCP, RTMP, XHR, SOAP/WSDL, REST, Reverse-AJAX, xSON, JQuery, WebSocket, SSE</li></ul>
<b>Database, Data storage, Brokers</b>	<ul style="list-style-type: none"><li>• MySQL</li><li>• MongoDB global/sharded cluster expertise, basic knowledge of Cassandra</li><li>• Redis, Memcached, Groupcache</li><li>• PuppetDB, Hiera</li><li>• S3 API, RabbitMQ, PubNub</li><li>• Basic Neo4j, Cayley</li></ul>

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<b>Server software</b>	<ul style="list-style-type: none"><li>Linux Servers Ubuntu/Debian, OSX</li><li>Nginx/ Apache2 / Node.js / HAProxy / Gearman / NSQ / NFS / Passanger / WEBrick etc.</li><li>Coperegg, Datadog, Newrelic, MMS, Bipbip etc.</li></ul>
<b>Other</b>	<ul style="list-style-type: none"><li>VirtualBox, Nova, Vagrant, Capistrano, Pulsar, NPM, Gem, Rake, Bundle, Librarian</li><li>PHPStorm (php, node.js, golang), RubyMine (puppet, ruby, shell), Xcode, VSC</li><li>Basic knowledge of Apache Hadoop / Hive / Pig</li></ul>
<b>Management</b>	Advanced LeSS, Scrum, Agile and Kanban JIRA, Confluence, Slack LucidChart, Gantt

## Work experience

Employer	Position and responsibilities	Date
<b>VRenetic, Inc.</b> Los Angeles, USA  <a href="http://www.vrenetic.com">www.vrenetic.com</a>  <a href="http://www.vresh.live">www.vresh.live</a>  Expanding the accessibility of 360° environments to the mass public.  Founded by <a href="#">Roland Emmerich</a> (Chairman) and <a href="#">Marco Weber</a> (CEO)  Offices - Los Angeles - Warsaw - Beijing - London	<b>Chief Technology Officer (CTO), Partner</b>  Bringing the next generation of ultra-high quality 360&VR live streaming and low-latency communication on consumer mobile devices and enabling the VR ready social interactions using the VR publishing tools for user generated content. Transforming challengeable vision and ideas into a self-breathing ecosystem. Focused on customer and b2b oriented products.  <b>Key responsibilities</b> <ul style="list-style-type: none"><li>Managing 40+ people team in California and Europe (using LeSS)</li><li>Research for next generation of VR/AR/MR and social media</li><li>Recommendations and support for CEO and stakeholders</li><li>Vision definition, clarification and roadmap planning &amp; controlling</li><li>Customer and b2b products definition, schedule, roadmap and sing off</li><li>Budget estimations, planning, controlling and reporting to stakeholders.</li><li>Business model definition, execution, adjustments and controlling</li><li>Startup culture and best practices overview</li><li>Coordination of product managers and product owners</li><li>Coordination of project managers</li><li>Technology roadmap, planning, execution and controlling</li><li>Coordination of platform and media Solution Architects, DevOps and Sysadmins</li><li>Long term and large scale operations roadmap, optimisations and migrations</li><li>Security audits and controlling</li><li>Best practices roadmap, planning and controlling</li><li>Occasionally leading low level teams of various expertise</li><li>Source code quality reviews and best practices audits</li><li>Source code and products roadmap coverage review and orchestration</li><li>Making sure the business needs are met on design, development and operation level</li><li>Occasionally coding in puppet, ruby, cpp, js, php and performing devops tasks!</li><li>Overviewing the day-to-day delivery risk management</li><li>Managing cooperation with outsourcing development organisations. Lead for 3rd party project managers and solution architects. Vision, know-how, technology exchange, as well as 3rd party libraries, licence approval.</li><li>Constantly seeking for media experts and talents</li></ul> <b>Basic technological stack at Vrenetic/Vresh</b> <ul style="list-style-type: none"><li>JAVA, Node.JS, C++, C#/Unity3D, Kotlin, Swift, Terraform, Ruby, Puppet, Python</li><li>GStreamer Framework, FFmpeg Libs, Spring, Angular, iOS API, Android API</li><li>GPU/Media real time 360 Transcoding/Reprojections/Transformations/Effects;</li></ul>	2017.04 - now

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	<ul style="list-style-type: none"> <li>Janus WebRTC; UDP Proxy</li> <li>• MongoDB, Object Storage (S3), Redis, TusD</li> <li>• RabbitMQ, PubNub, CDN</li> <li>• K8S, Traefik, Docker (Hub), Terraform, Ansible, Nexus</li> <li>• Grafana, Karma, Prometheus,, PagerDuty, AlertManager</li> <li>• BlackBox, GPG, Keybase, Loggly</li> <li>• Scalable Jenkins Master/Slaves; Travis</li> <li>• Softlayer, AWS</li> <li>• OAuth, OpenAPI/Swagger, ProtoBuf/ZMQ, REST</li> <li>• HLS/TCP, RTP/UDP, RTCP/UDP; h.264, h.265, AAC, Opus; WebRTC; Nvidia NVENC;</li> <li>• Layers: backend APIs, clients: iOS, Android, Web SPAs, Bots</li> <li>• BI: Tableau Ecosystem; StitchData with RedShift; Matillion ETL</li> <li>• Micro-services oriented; full OOP, TDD, E2E, MVC; abstracted to backend (business logic layer, media engine layer, AI layer), middleware, frontend with SDKs, libs, plugins and clients</li> <li>• High availability, high scalability with multi-region zero downtime deployment and data residency support; global media replication; GDPR</li> </ul>	
<p><b>Cargo Media AG</b> Basel, Switzerland</p> <p><a href="http://www.cargomedia.ch">www.cargomedia.ch</a></p> <p>Owns social network applications with almost 20 millions users around the world. <b>Growing everyday!</b></p>	<p><b>Research / DevOps / Engineering / Team lead</b></p> <p>Mainly responsible for automation, scalability, security, monitoring of applications &amp; infrastructure deployment. Constantly researching, proving concepts and introducing new solutions. Leading teams.</p> <p><b>may/2016 until april/2017</b> Research, prototype, proof of concept of 2nd generation of 3D/VR platform and dedicated hardware/portable solution for 4K stereo streaming with chroma keying support.</p> <p><b>january-may/2016</b> Mainly focused on scalability and geo-oriented architecture of 3D/VR streaming and communication.</p> <p><b>march-december/2015</b> Research, prototype, proof of concepts, architecture, development, lead of teams for 3D/VR real-time streaming and communication platform. Delivery of low latency software/hardware stack for capturing, processing, streaming and playback.</p> <p><b>september-december/2014</b> Mainly responsible for infrastructure automations and dynamic scalability.</p> <p><b>june-august/2014</b> Designed production ready MongoDB architecture. Implemented puppet automation modules for fully sharded, replicated solution, pulsar orchestration tasks for 100% cluster maintenance and hiera/facts based cluster modeling. Introduced CopperEgg/Bipbip monitoring and MMS backuping/restore. Training for DevOps team etc... Migrated heavy loaded mysql tables (hundred of millions records and rise very fast) to sharded mongo collections.</p> <p><b>april-may/2014</b> Migrating Network File Server to AWS S3 solution. Responsible for designing and executing strategy; implementing CM framework extension for S3 (AWS SDK); adjusted video streaming services to work with S3; introduced backuping, restoring and troubleshooting strategy for production.</p> <p><b>january-march/2014</b> Working on REST/API platform for bridging Hipchat to Pulsar via Hubot and Pulsar-Server. The goal is to achieve a more automated deployment process. Working</p>	<p>2013.04 - 2017-04</p>

on releasing CM based framework as open source - full production ready environment out of the box which include php framework, media server (wowza), stream server (socket-redis/node.js), search server (elasticsearch), backup and many more. All using the highest standard, patterns and technologies (puppet, librarian, ruby, vagrant, serverspec etc.)

## **september-december/2013**

started to lead the “automations team” mainly responsible for implementing new mechanisms for infrastructure and application deployment (capistrano, pulsar, puppet, puppetdb, hiera, ruby). Introducing server monitoring tools (bipbip, copperegg).

## **june-august/2013**

responsible for extending and optimizing PHP framework (CM/PHP/JS) on the low level (streaming, caching, payment gateways) and also improving the real time messaging platform (socket-redis/node.js).

## **april-may/2013**

responsible for new features of current applications e.g. pinboards, photo verification etc. (PHP/JS/mysql/CSS/JQuery/Smarty...)

Some of public projects with significantly higher contribution:

- <https://github.com/cargomedia/puppet-packages>
- <https://github.com/cargomedia/mms-api>
- <https://github.com/cargomedia/janus-gateway-ruby>
- <https://github.com/cargomedia/janus-gateway-rtpbroadcast>
- <https://github.com/cargomedia/janus-gateway-audioroom>
- <https://github.com/cargomedia/bipbip>
- <https://github.com/cargomedia/pulsar-rest-api>
- <https://github.com/cargomedia/debian-packages>
- <https://github.com/cargomedia/vagrant-phpstorm-tunnel>
- <https://github.com/cargomedia/CM>
- <https://github.com/cargomedia/hubot-pulsar>
- <https://github.com/cargomedia/socket-redis>
- <https://github.com/cargomedia/cm-tools>
- <https://github.com/denkmal/denkmal.org>

Some of currently used technologies:

- **Languages:** Puppet, Go, Ruby, PHP, C/C++, Node.js, Shell
- **MVC framework development:** CM, Zend, Beego, Smarty, JQuery, Backbone, Underscore etc.
- **RealTime Messaging platform:** Node.js, SockJS, Redis, NPM etc.
- **RealTime Streaming and Communication:** Janus-Gateway, WebRTC, RTP, RTSP, REMB...
- **Virtual Reality development:** WebVR, WebGL, Gstreamer, OpenGL, OMX, VP8/9, Opus, h264, Chroma-keying, GLSL...
- **Apps development:** PHP, JS, Ruby, Go, REST(ful), APIs, MySQL, Mongo, Redis, Socket-Redis, ElasticSearch, Gearman, Memcache, XHTML, CSS3, xJSON, XML etc.
- **Apps Development & Deployment & Testing:** Git, Vagrant, Composer, Capistrano, Pulsar, NPM, Gem, Gi, Jenkins, Travis, Serverspec etc.
- **Infrastructure Deployment:** Puppet, PuppetDB, Hiera, Facter, Augeas, Librarian, Serverspec, Foreman, Bash, Terraform etc.
- **Middleware:** Consul, Serf, NSQ

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	<ul style="list-style-type: none"><li>● <b>Monitoring and debugging:</b> Copperegg, MMS, Newrelic, Bipbip etc.</li></ul> <p>My latest open source projects are usually described on company blog at <a href="http://www.cargomedia.ch/blog/">http://www.cargomedia.ch/blog/</a> - search for signed by Chris or at <a href="http://blog.kris-lab.com/">http://blog.kris-lab.com/</a></p>	
<b>Newlcon Ltd.</b> Bristol & Bath Science Park, Innovative Center Emersons Green BS16 7FR  <a href="http://www.newlcon.net">www.newlcon.net</a>	<b>Senior Software Engineer</b>  <b>Objective-C / C++:</b> Cocoa Framework, SQL, OpenCV, SURF/SIFT, ZBar (QRCode); XCode / iOS; Yii, Nii, <b>PHP</b> , JQuery, Backbone.js, MySQL, Memcached, HTML5/CSS3, Bootstrap; <b>Node.js</b> , Express, Socket.io (client, server) MongoDB, Redis;  <ul style="list-style-type: none"><li>● Designing and implementing iOS-based (Cocoa Touch) image processing application for Airbus aircraft landing gears parameters measurement. Object recognition (OpenCV) and calculation of width, height, perspective. iOS SQLite based application with large number of data (technical information, images). Real time image processing and object recognition using advanced templates matching. Calculation of object dimension and unknown parameters for pressure measurement in land-gear using only a camera. Usability improvement using QRcodes reader.</li><li>● Designing and implementing client/server layer of web-socket API. Advanced multi-accounts, multi-channel and multi-room protocol based on Node.js (C++, OOP JavaScript, CoffeeScript), Socket.io, MongoDB, Redis. Preparing commercial versions of client JS and PHP library for <b>real time messaging</b> (n:push). Responsible for vertical and horizontal scalability.</li><li>● Implementing web-based iPad optimized app for real time communication using Yii (PHP), MySQL, MongoDB, RESTful, Backbone.js, n:push (multi-channel subscribe and publish platform), Bootstrap etc.</li><li>● Designing and implementing web-based, horizontal scalable, high-performance systems for reporting, analyzing, presentation using Yii, MongoDB, Memcached, Redis etc.</li><li>● Designing and implementing Yii extension for advanced internationalization through UI and data storages.</li></ul> <p>Example of my delivered solution:</p> <ul style="list-style-type: none"><li>● <a href="http://www.newlcon.net/case-study/airbus-maintenance-app/">http://www.newlcon.net/case-study/airbus-maintenance-app/</a></li></ul>	2012.06 – 2013-04
<b>DualSoft Polska Ltd</b> Poznan, Poland  <a href="http://www.dualsoft.pl">www.dualsoft.pl</a>	<b>Freelance Software Developer</b>  PHP5/JavaScript/C#/C++; Yii / Codeigniter; OOP, xMVC, AJAX / JQuery / xJSON / xHTML / CSS, Servers: Node.js, Nginx, Apache, DB: MongoDB, MySQL, Redis; APIs/WebServices: SOAP/WSDL, REST; Architectures: SOA, ROA;  <ul style="list-style-type: none"><li>● Co-designing infrastructure for new product: USB Device / Desktop App / eCommerce / Social Website; prepare to handle high volume traffic using balancing, caching, replications; reliability, scalability, monitoring using applications framework for distributed computing;</li><li>● Co-designing Service &amp; REST Oriented Architecture; implementing cores of WebServices / APIs;</li><li>● Designing high speed DB infrastructure based on noSQL; implementing core solutions.</li><li>● Designing high speed Client-Server communication based on AJAX/JQuery/JS/HTTP and Node.js server; implementing core.</li></ul>	2012.03 – 2012.05

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	<ul style="list-style-type: none"> <li>Setting up and testing scalability and performance of frameworks: Hadoop / Hive / Pig and xSQL using TSUNG framework for users simulating</li> </ul>	
<p><b>DualSoft Polska Ltd</b> Poznan, Poland</p> <p>DualSoft is a producer and provider of professional ERP class systems and IT services, mainly for building and gas industry. Core products include platforms for workflow, dms, planning &amp; controlling and budgeting.</p> <p><a href="http://www.dualsoft.pl">www.dualsoft.pl</a></p>	<p><b>Senior Software Engineer, Co-founder, CEO</b></p> <p>PHP4, PHP5 / PEAR / MySQL / PostgreSQL / SOAP/WSDL / XAMPP / Linux Server / Windows Server and others, front-end: xHTML / CSS / JavaScript / AJAX / JQuery + UI / XML / JSON and others; C++ Programmer, C# Programmer: .NET 3.5/4.0, MSSQL, Linq, WPF, WCF.</p> <ul style="list-style-type: none"> <li>I was responsible for day to day running of 3 teams: PHP, C# and technical. Along with a very good knowledge of PHP and I was fully integrated in the PHP team (focused on backend and frontend). In C# I have a good knowledge in team management and I wrote intermediate solutions and unit tests. In the technical area I have a very good knowledge in configuration and management of servers and services.</li> <li>Above all, I was responsible for delivering a fully functioning, ready to use robust solutions for business clients.</li> <li>Very good knowledge of database layer, business layer and user layer design in web-based systems and good knowledge of design in desktop systems.</li> <li>I built many web-based systems using web technology (PHP, PEAR, mySQL, SOAP, MVC, JQuery, xHTML, CSS, Apache etc) and related technologies, mainly for medium and big size companies (100-500 people) in areas of workflow systems, DMS systems, planning and controlling, finance, storage, invoicing, budgeting and others contracted by clients functions in existing solutions and in newly implemented solutions as well (EXCEL import/export, PDF, Word, BarCodes, E-mail, SMS APIs, graphic generation: diagrams, charts; etc). Good knowledge of ERP, DMS, Workflow class systems.</li> <li>Responsible for developing innovative products: platform for baby care based on dedicated mobile devices (AVR architecture and related technologies) connected to PC application via USB (C#, .NET, SQL, Linq, Threading, WCF, WPF) and website (PHP5, MVC, SOAP/WSDL, mySQL, JQuery, AJAX etc) and web services (C#, WCF, Linq etc).</li> <li>I integrated existing systems from various suppliers for business clients using API, WebAPI and simple implementation of SOA. Areas of integration: accounting, staffing, controlling, banking systems, SMS providers. Conversion of existing products to the structure of SOA for customers with high volume traffic in specific areas of the company.</li> <li>Good knowledge of optimizing server-based applications, mainly in terms of efficiency and speed of calculating high volume reporting. (DB structures / PHP / C# / Virtualization / Balancing)</li> <li>Overseeing the implementation of IT products. Carrying out training sessions for local staff and IT departments.</li> </ul>	2007.05 – 2012.02
<p><b>“KWG” PLC</b> (PBG Capital group) Szczecin, Poland</p> <p>Specialises in the delivery of environmental infrastructure projects, such as water supply and sewage systems, intermediate pumping stations and sewage</p>	<p><b>Chief Technology Officer (CTO)</b></p> <p>I was mainly responsible for planning IT strategy and cost reduction in company departments. Acceptance of IT documents and costs using company ERP system. Co-operating with all departments to improve information technologies and enhance communication. Summary:</p> <ul style="list-style-type: none"> <li>Auditing and reporting to the Board</li> <li>Planning and controlling annual budgets</li> </ul>	2008.08– 2012.02

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treatment plants.	<ul style="list-style-type: none"><li>• Technology and solution research</li><li>• Managing systems of data security</li><li>• Providers &amp; Subcontractors Management</li><li>• Supervising workflow of IT documents</li></ul>	
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## Education

School	Information	Date
University of Technology Poznan, Poland	Faculty of Computing and Information Science Embedded Microprocessor Systems <b>MSc course completed</b>	2005-2007
University of Technology Poznan, Poland	Faculty of Computing and Information Science Automation and Management <b>BSc, 2.1</b>	2002-2005
Telecommunications High School Poznan, Poland	Telecommunications and Information Technology Technical degree - Systems of Data Communication	1997-2002

## Other skills and abilities

- Deep insights in the process of software creation; experience with projects at all levels of abstraction – from assembler through C programming of embedded devices, academical usage of C++ to commercial PHP, C++, Objective-C, C# programming
- Extensive knowledge and practices on project planning and management
- Good presentation skills (occasional speaker)
- Member of robotics group "CybAiRBot" at Poznan University of Technology. Co-organizer and contestant of first Polish edition Sumo-Robots competition, 2004

## Resources

- Github <https://github.com/kris-lab> (sorry, currently majority is private)
- LinkedIn at <https://www.linkedin.com/in/krzysztof-chris-stasiak-6261244b/>
- Rubygems <https://rubygems.org/profiles/kris-lab> (sorry, currently majority is private)
- NPM <https://npmjs.org/~kris-stasiak> (sorry, currently majority is private)
- Bitbucket <https://bitbucket.org/kris-lab> (sorry, currently all is private)
- Blog <http://blog.kris-lab.com/> (sorry, currently under maintenance)

## Interests

Travelling, Skiing; Robotics and Automatics, Neural Network, Artificial Intelligence, Free energy generators

## References

Please request a reference letter and portfolio overview.

## Languages

- Polish native
- English full professional working proficiency