Michal DUDEK, MSc, PMP
Project Manager, SRE, Software Engineer

www.dudek.tech
/in/dudek-michal/
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years old

Curriculum Vitæ

Personal Profile

A project manager who's able to assimilate large quantities of information, identify the key issues and organize a clear strategy and transform it into goals and objectives within the team. A valuable member of an organization, focused on achieving results in highly pressurized, challenging and international working environments.

An open-minded engineer with a broad knowledge of site reliability engineering, software engineering, modern IT solutions and a large-scale, high-availability, distributed control systems. Has 9 years of experience in the design, development and maintenance of software, hardware and IT infrastructure for a real-time and industrial control systems running 24/7 operations. Committed, organized and conscientious, providing quality results. General manner problem-solver who instigates and promotes changes as an opportunity for constant improvement of the systems. Produces workable and timely solutions that conform to requirements.

Professional Experience

2013 – 2018 **Project Manager & Site Reliability Engineer, CERN, Switzerland**
Technology Department, Electrical Power Converters Group

Project management:
- gathering high-level information on the project;
- defining project objectives, key deliverables and measurable success criteria;
- identifying stakeholders and capturing their needs, constraints and expectations;
- performing functional analysis of requirements for the new control systems;
- determining development approach and developing project management plan;
- directing and managing controls related projects (software, hardware, infrastructure);
- managing budget, procurement and contracts;
- ensuring quality, security and safety;
- coordinating work of teams, monitoring and controlling progress;

Team management:
- driving continuous improvements to the engineering workflow;
- deploying, configuring and integrating team management and software development tools;

Software development and control systems engineering:
- defining systems design;
- selecting proper software & hardware solutions;
- determining appropriate implementation strategy;
- deciding on pertinent documentation approach;
- defining test policies and establishing procedures;
- developing, deploying, configuring, integrating and commissioning control systems;
- disseminating knowledge and informing others of the practices to be implemented;

Professional Experience (continued)

Maintenance & 24/7 operational support for the critical high-availability systems:

- maintaining 2500+ production control systems;
- configuring, integrating and maintaining 35 GNU/Linux production servers;
- driving continuous improvements of the existing systems;
- developing, deploying and integrating software tools for infrastructure management;
- providing user support, technical expertise and advice;

2010 – 2013 **Software Engineer & Control Systems Engineer, CERN, Switzerland**
Technology Department, Cryogenics Group

Software development and control systems engineering:

- designing software & hardware architecture;
- developing, deploying, configuring, integrating and commissioning control systems;
- automating repeatable tasks with software tools;
- incorporating continuous integration (CI) system into software development workflow;

Education

2005 – 2010 **AGH University of Science and Technology, Cracow, Poland**
Faculty of Electrical Engineering, Automatics, Computer Science and Electronics
Master of Science in engineering (M.Sc.Eng.): Electrical Engineering, Computer Engineering for Industrial Applications

Projects

2014 – 2018 *Software enhancements and modern monitoring solutions for a large-scale, high-availability distributed control systems at CERN*

My mandate as a technical leader of a project, site reliability engineer and a senior software engineer at CERN was to maintain C++ real-time software for a large-scale, distributed control systems for 2500+ power converters running 24/7 operations. The responsibilities included software upgrades based on the analysis of requirements of the machines operation team, as well as integration, configuration and maintenance of 35 GNU/Linux production servers. The objective of the project was to increase the availability of the machines, eliminate the errors experienced by the on-call service and implement modern monitoring solutions based on the Elasticsearch stack and Grafana. As a result, the reliability of the complex increased by 20%.

Project Management | Strategic Planning | Technical Leadership | Site Reliability Engineering | Software Engineering | Large Scale | High Availability | Distributed Systems | Critical Infrastructure | Complexity | Technology | Testing

Knowledge & Skills

Personal Qualities

Leadership | Management | Multitasking | Communication | Negotiation | Active Listening | Emotional Intelligence | Patience | Problem Solving | Analytical Reasoning | Critical Thinking | Attention to Detail | Perseverance | Teamwork | Cultural Awareness

Computer Science, Electronics and Controls

GNU/Linux | Bash | C/C++ | PHP | SQL | Data Structures | Big O | HTML | JSON | XML | CSS | GIT | SVN | Systems Design | Networking | Back-End | Nginx | Jenkins | ELK stack | Grafana | MariaDB | JIRA | Matlab | Embedded Systems | Siemens PLCs | Profibus | Profinet | SCADA | WinCC-OA | UNICOS | FESA

Languages

Polish (native) | English (fluent) | French (elementary) | German (elementary)