Qualifications

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| Personal data | Akram Gharbi |
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| Age: | 38 |
| Gender: | Male |
| Nationality:  Education level: | German  Mecatronics Engineer (FAU Erlangen-Nuremberg) |

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| Fields of responsibility / focus in the project |
| − Software development in C #(.NET) and SQL  − Embedded software development  − Scripting in Python  − Software development and testing according to V-Modell (including preparation of the corresponding documents)  − Development of test tools |

Technical competences

Opeating systems

Linux - Debian ✓✓

Linux – Ubuntu ✓✓

Linux – Knoppix ✓✓

Microsoft DOS ✓✓✓

Microsoft Windows XP Professional ✓✓✓✓

Microsoft Windows 7 ✓✓✓✓

UNIX – Open Solaris ✓✓

Back office- and Server applications

Samba ✓✓✓

OPEN VPN ✓✓✓

Apache ✓✓✓

Programming and Scripting languages

C/C++ ✓✓✓✓

DOS Batch ✓✓✓

HTML ✓✓✓

Java ✓✓✓

JavaScript ✓✓✓

C#(.NET) ✓✓✓✓

MATLAB ✓✓✓

Python ✓✓✓✓

KOP/FUP ✓✓✓✓

SCL ✓✓✓✓

AWL ✓✓✓

Graph7 ✓✓✓✓

VHDL ✓✓✓

Databases

MS SQL Server ✓✓✓✓

Oracle ✓✓

PostgreSQL ✓✓

Security

Backtrack ✓✓✓

SOPHOS Antivirus ✓✓

Proxy Services (General) ✓✓✓

Network- and Systemmanagement Tools

Sniffer (General) ✓✓✓

Network protocols and Routing protocols

DHCP ✓✓✓

DNS ✓✓✓

FTP ✓✓✓

HTTP ✓✓✓

TCP/IP ✓✓✓

UDP ✓✓✓

Bus systems

Profibus ✓✓✓

CAN ✓✓✓✓

Profinet ✓✓✓

SPI ✓✓✓✓

I2C ✓✓✓

Network Hardware

Ethernet ✓✓✓

LAN ✓✓✓

Router ✓✓✓

Switches ✓✓✓

Web application server

Apache Webserver 1.3.xx ✓✓✓✓

Apache Webserver 2.0.x ✓✓

Microsoft Proxy Server 2.0 ✓✓

Hardware

General Hardware-Knowledge. ✓✓✓

RAID Technologies general ✓✓

Keyence camera ✓✓

Micro-Epsilon distance sensor ✓✓

Weiss Rotary table ✓✓

Trumpf Laser ✓✓✓

Rofin Laser ✓✓✓

Bosch screwsystem ✓✓✓

Sortimat feed ✓✓✓

Cognex DMC reading device ✓✓✓✓

Cognex camera ✓✓✓

Mitsubishi Scara Robot ✓✓✓

Simotion Axes ✓✓✓

Manufacturing Execution Systeme

Itac ✓✓✓

Brosis ✓✓✓

PLC

Siemens Simatic S7-300 ✓✓✓

Siemens Logo ✓✓

Beckhoff IPC CX20xx ✓✓

Selectron CPU 831-TG ✓✓✓

Mitrac VCU ✓✓

Training and certificates

Knoppix

.Net Technologien und C#

Siemens ST-PRO1

ISTQB Certified Tester

TFS Moderne Software-Entwicklungsprozesse

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| Review basics:  ✓ Theoretical knowledge  ✓✓ Advanced knowledge / practical experience up to 3 years  ✓✓✓ Comprehensive knowledge / practical experience over 3 years  ✓✓✓✓ Project experience / practical experience over 5 years |

Project activities / -Experience

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| Branch of industry: | Medical technology |
| Customer: | PerkinElmer |
| Responsibility in the project: | Project responsible in the software development of a test framework for the automated testing of the UI of a software. Software creation in C #, scripting in batch, test case creation in Ranorex, interface development to MS SQL database and EventStore |
| Project environment: | Windows 10, VS 2019, Jenkins, Git, GitHub, Jira, Confluence, Ranorex, MS SQL Server 2019, EventStore, MS build |
| Duration of the Project: | 01.12. 2020 – Today |
| Job description/Project:: | * Software development in C# * Software Debugging * Software testing * Verification of SW-Requirements |

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| Branch of industry: | Automotive |
| Customer: | MAGNA Electronics |
| Responsibility in the project: | Software developer for Autonomous driving vehicles with LIDAR. Software creation in C ++, scripting in batch. |
| Project environment: | Windows 10, VS 2017, CAN, Qt Framework, Qt GUI, OpenGL, QNX, C++ 11, PTC integrity, Misra C, Eclipse, Enterprise architect, Lauterbach debugger, Jenkins, ASpice, UART, SPI, I2C, Embedded Systems, ARM A53, ARM R7, ICCOM, OpenCV, DLT, MIPI CSI-2, Git, GitHub |
| Duration of the Project: | 01.11.2019 – 30.11.2020 |
| Job description/Project: | * Creation of software requirements * Software development (C++, Python) * Software Debugging * Software testing * Verification of SW-Requirements |
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| Branch of industry: | Special machines manufacturer |
| Customer: | Speedup Automation |
| Responsibility in the project: | Project manager in software development from the creation of the software and architecture of a program that automatically creates control software. |
| Project environment: | Windows 10, VS 2019, XML, TFS, TwinCAT XAE, TwinCAT3, MS Visio, C#, Robotics |
| Duration of the Project: | 01.07.2019 – 31.10.2019 |
| Job description/Project: | * Definition of software architecture * Software development (C#) * Software Debugging |
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| Branch of industry: | Automotive |
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| Project environment: | Windows 10, VS 2017, Qt Framework, Qt GUI, OpenGL, OpenCV, CAN, QNX, C++ 11, PTC integrity, Misra C, Eclipse, Enterprise architect, Lauterbach debugger, Jenkins, ASpice, UART, SPI, I2C, Embedded Systems, ARM A53, ARM R7, ICCOM, DLT, MIPI CSI-2, git, Github |
| Duration of the Project: | 01.09.2018 – 30.06.2019 |
| Job description/Project: | * Creation of software requirements * Software development (C++, Python) * Software Debugging * Software testing * Verification of SW-Requirements |
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| Branch of industry: | Pharmaceutical industry |
| Customer: | ERWEKA |
| Responsibility in the project: | * Project manager in software development from the creation of software requirements to software testing. Software creation with Winforms, WPF and Xamarin. * visualization of data via an app on the smartphone, via a client on the computer * Creation of a WCF application for controlling an IO interface. Porting and extending the business logic to a WCF application * Development of a script that secures and / or archives MS SQL databases and places them on the network, if available. * New development of an MSI package builder with WIX toolset including licensing of software during installation * Revision of the UI * Creation of a new UI for user administration * Redesign and implementation of the audit trail * Reconstruction of the software feature-based, in which features can be activated for a fee |
| Project environment: | Windows 7, VS 2013, VS 2017, Qt Framework, Qt GUI, OpenGL, CAN, Putty, .NET, MS SQL Server, GAMP, Pharma-environment, Lims Systems, Data integrity, Jira, Confluence, Bitbucket, Git, Jenkins |
| Duration of the Project: | 01.04.2016 – 31.08.2018 |
| Job description/Project: | - Creation of software requirements - Create software according to GAMP (C ++, C #, Python) - Database design (Relational, Object-oriented, MS SQL) - Software debugging - Creation of test cases - CI with Jira, Confluence, Bitbucket and Jenkins - Implement current GMP guidelines in the software (audit trail) - Documentation according to GMP specifications |
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| Branch of industry: | Transport |
| Customer: | ABB |
| Responsibility in the project: | Site manager and project manager in software development from the creation of software requirements to software testing |
| Project environment: | Windows 7, Visual Studio 2013, Selectron Symphony Suite, TCMS, CAN, Putty, .NET, Qt Framework, Qt GUI, MS Team Foundation Server, CAP1131, MS SharePoint, |
| Duration of the Project: | 01.07. 2015 – 31.03.2016 |
| Job description/Project: | - Employee Management - Creation of software requirements - creation of software (C ++, LAD, C #) - Software debugging - writing test requirements - Creation of test cases - Test Automation (C #) - Test Execution - Simulation of external devices |
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| Branch of industry: | Transport |
| Customer: | Bombardier |
| Responsibility in the project: | Support in the field of laboratory and vehicle testing - industry |
| Project environment: | Rational Clear case, Clear quest, Linux Embedded, Java, XML, VxWorks, Python, DCUTerm, MITRAC Tools, IEC61131, Putty, C++ |
| Duration of the Project: | 01.04. 2014 – 30.06.2015 |
| Job description/Project: | - Creation of test specifications for laboratory tests - Transfer of laboratory tests to vehicle groups - Test Case Management - Creation of test reports - Troubleshooting, support of SW developers and system engineers (C ++) - Editing Software Change Requests Java - Perform manual tests - Run the automated tests (Python) - Creation of new test cases (Java) - Documentation of the results - Extension of automated tests (Java) - Script Development - Terminal applications |
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| Branch of industry: | Transport |
| Customer: | VOITH |
| Responsibility in the project: | Subproject leader in the field of concept development for the electrical as well as software infrastructure of an autonomously driving vehicle |
| Project environment: | Windows 7, CAN Real, Visual Studio 2010, Selectron Symphony Suite, TCMS, CAN, Putty, .NET, Qt 5.2 |
| Duration of the Project: | 01.01. 2014 – 31.03.2014 |
| Job description/Project: | * - Concept development of the electrical infrastructure of an autonomously driving vehicle * - Leading programming of the TCMS (C ++) and Qt * - Study on the availability of sensors to capture the environment * - Programming a tool to simulate an available distance control sensor (C #) * - Programming a CAN interface for recording sensor data |
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| Branch of industry: | Special machines manufacturer |
| Customer: | Schiller automation |
| Responsibility in the project: | Software engineer |
| Project environment: | Windows 7, VMWare, Siemens Step7 KOP, FUP, C++, AWL, WinCC flexible 2008 SP2, Edrawings, Freemind, MS Office 2010, UltraVNC, Wireshark, Rexroth BS350, Regen-Licht-Sensor, Lane change assistant, Tandem pump, 5S, Trumpf Laser, Cognex camera, Keyence camera, micro epsilon Laser distance sensor, Weiss rotary indexing table, Mitsubishi Sara Robot, Simotion Scout, Cognex DMC Reader, Siemens Safety SPS, Festo, Ethernet, Profibus, Profinet, RS232 |
| Duration of the Project: | 01.04. 2012 – 31.12. 2013 |
| Job description/Project: | - Analysis and structuring of tasks - Development of innovative and economical solutions - achievement of functional, cost and date targets - Design, programming, commissioning and testing of the machine software in-house and on-site at the customer under various Siemens S7 controllers - Programming in Graph, C ++, STL, LAD, and FBD - New development of standard software components for newly used devices (C ++) - Training of operators on the facilities - documentation |
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| Branch of industry: | Photovoltaics |
| Customer: | Centrotherm |
| Responsibility in the project: | Process engineer commissioning |
| Project environment: | Windows 7, Windows CE, C#, VBA, Visual Studio 2010, MS Office 2010, Beckhoff IPC, PC-DMIS, C.DIFF, Embedded Systems, C.PLASMA, C.LAS, MS Visio, .NET |
| Duration of the Project: | 15.07. 2011 – 29.02. 2012 |
| Job description/Project: | - Process, computer and installation commissioning of Centrotherm systems for photovoltaic and semiconductor technologies - Process technology support in the area of plant production - aptitude tests and acceptance tests on process plants - Identification and updating of consumption values and reliability data of process furnaces - Preparation of marketing documents and technical descriptions - Customer Training - Implementation of process specifications and specifications for the design and software department - Training in laser diffusion - Programming a surface from the PC-DMIS (program interface for Hexagon measuring station) started and different recipes for wafer measurement can be performed - Development proposal for a new surface for the visualization of the furnace process chamber (VBA) |
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| Branch of industry: | Photovoltaics |
| Customer: | Valentin Software |
| Responsibility in the project: | Software developer in the photovoltaic department |
| Project environment: | Visual Studio 2010, C#, Visual Studio 2008, Windows 7, MS Office 2007,MS Visio, Freemind, Mantis, TortoiseSVN, Insel, PVsyst, PV\*SOL Expert, PV\*SOL Basic, XML, Databases, Infragistics, DLL, XSD, .NET, Battery inverter, battery charging simulation, battery modeling, photovoltaic |
| Duration of the Project: | 01.10. 2009 – 30.06. 2011 |
| Job description/Project: | - Software development in object-oriented programming in C # - Implementation of program interfaces with and their testing - Data validation from the calculation kernel and its testing (battery inverter, battery, additional generator) - Programming of interfaces to other technologies like DLL's and SQL databases - Implementation of bidirectional interfaces to XML files - Data validation and further development of the model for determining the current-voltage characteristic of PV models |
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| Branch of industry: | Fiber optics |
| Customer: | Schott AG |
| Responsibility in the project: | Project manager, design, experiment, construction and integration of a new machine into production (fiber optic technology) |
| Project environment: | Windows XP, MS Office, Step7, LOGO, Solid works, Six Sigma, 5S, Fiber optics |
| Duration of the Project: | 1.10. 2008 – 30.04. 2009 |
| Job description/Project: | - Establishment of a concept for endless tube bundling of fiber bundles - Construction of a test facility for endless hose-in of fiber optic cables - Construction of a production-ready system for endless fiber bundles, including drawing production and procurement of the components - Process optimization in the department of high voltage direct current transmission - Development of a trolley for faster processing of cables for high-voltage DC transmission - Process optimization in the FST area - Extension of the FST line with another process furnace |