

Mauro Moro

Senior Software Engineer

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PROFESSIONAL SUMMARY

Senior Software Engineer with 25+ years of experience in full software lifecycle management, automation, and system integration across highly regulated industries. Expert in designing, developing, and deploying automated solutions from design through validation (FAT/SAT/IQ/OQ/PQ), complying with industrial standards (IEC 61131-3, ISA-95, ISA-88/PackML, GAMP 5, GMP, CSV). DevOps & Software Engineering Expertise: Extensive experience implementing CI/CD-like workflows for automated deployment pipelines, version control systems, and database management. Strong background in developing containerized industrial applications, custom .NET Core microservices, ASP.NET web interfaces, and automated testing frameworks. Proven track record managing complex distributed systems, ensuring security compliance, and integrating IT/OT infrastructure in mission-critical environments. Global Experience: Delivered projects across pharmaceutical, automotive, oil & gas, power generation, and manufacturing sectors in South Africa, Congo, Angola, Egypt, Algeria, USA, Canada, China, Iraq, Turkey, UAE, Russia, and throughout Europe.

CORE SKILLS

Software Development & DevOps: C#, .NET Core, Python (incl. OpenCV), JavaScript, ASP.NET, ASP.NET Core APIs, REST APIs, Microsoft SQL Server (design, optimization, stored procedures), VersionDog, Git, PowerShell automation, OPC communication, middleware development, automated testing frameworks (IQ/OQ/PQ), virtual commissioning. Earlier languages: Visual Basic 6, VBA, C, Pascal, Java, Assembler. Industrial Automation & Control Systems: PLC programming (Siemens, Rockwell Allen-Bradley, Omron, Schneider/Telemecanique, GE-Fanuc, Bosch, Beckhoff, Mitsubishi, Codesys, HIMA), HMI/SCADA development (WinCC, WinCC OA, FactoryTalk, Wonderware InTouch/ArchestrA, CIMPLICITY), DCS (Emerson DeltaV, ABB Infi90, ABB S800xA, Siemens PCS7, Siemens Teleperm M, Foxboro), MES integration (Emerson Syncade, SIMATIC IT eBR, MODA-ES, custom MS-SQL MES), Industrial protocols (Profibus, ProfiSAFE, Profinet, Ethernet/IP, OPC UA/DA, Modbus, DeviceNet), Motion Control (Kinetix 5500/5000, SEW Movidrive, Rexroth IndraDrive, servo systems), Computer Vision (Cognex, OpenCV with Python), Industrial Robotics (COMAU, KUKA, ABB, FANUC, Staubli, MOTOMAN, Mitsubishi). Simulation & Virtual Commissioning: Technomatix Robcad, Delmia Igrip, ABB RobotStudio, Fanuc RoboGuide, Visual Components 3DCreate, RSEmulate5000, offline programming, digital twin concepts, process simulation.

Expert in industrial simulation and offline programming tools: Technomatix Robcad for robot simulation and offline programming, Delmia Igrip for digital manufacturing simulation, ABB RobotStudio 5.x for ABB robot simulation, Fanuc RoboGuide, Visual Components 3DCreate for discrete event simulation, RSEmulate5000 for Rockwell PLC simulation. Used extensively for layout validation, offline programming, virtual commissioning, and process optimization across automotive and manufacturing projects.

WORK EXPERIENCE

Senior MES Engineer

SKAN AG | Basel, Switzerland

SKAN AG - Senior MES Engineer (March 2024 – Present) - Basel, Switzerland. Part of the AMS project team as IT/OT specialist focusing on MES system development and integration. Daily duties include developing automated MES processes and implementing secure system integrations with QMS, EMS, DH, and SCADA systems. Building data pipelines for real-time information exchange between manufacturing systems. Managing configuration and deployment workflows in GMP-validated environments. Implementing automated monitoring and audit trail systems for compliance. Ensuring secure communication protocols between IT/OT infrastructure. Technologies: MES systems, SQL Server, system integration APIs, SCADA interfaces, document management systems.

Senior CSV & MES Engineer

LONZA | Basel, Switzerland

LONZA - Senior CSV & MES Engineer (September 2022 – February 2024) - Basel, Switzerland. Led Global Traceability Platform (GTP) implementations across multiple international sites including Geleen Netherlands, Houston USA, and Stein Switzerland. Designed and implemented validation automation workflows for global deployment consistency. Developed validation documentation including URS, FS, RA, IQ, OQ, PQ according to GAMP5 standards. Managed system configurations in document management systems QMS ensuring version control and traceability. Implemented secure data integration between MODA-ES MES and enterprise systems. Created automated testing procedures using KNEAT CSV validation platform. Coordinated cross-site deployments with standardized deployment procedures. Technologies: MODA-ES MES, KNEAT CSV, QMS Document Management, SQL Server, validation frameworks, automated testing, global deployment.

Senior Automation Software Engineer

BIOGEN | Luterbach SO, Switzerland

BIOGEN - Senior Automation Software Engineer (November 2021 – June 2022) - Luterbach SO, Switzerland. Automation team member (BES) involved in Control System Maintenance & Validation. Managed version control and deployment of control systems using VersionDog. Implemented audit trail systems including PM-Analyze and SIMATIC Logon for manufacturing/process servers. Executed validation procedures from Engineering phase FAT/SAT to Validation phase IQ/OQ/PQ. Maintained distributed control systems including EMERSON DeltaV DCS and EMERSON Syncade MES. Managed SIEMENS TIA Portal controllers with CPU-1500 series for auxiliary systems including BMS and CU. Ensured secure system integration and GMP compliance. Technologies: EMERSON DeltaV, EMERSON Syncade, SIEMENS TIA Portal, VersionDog, PM-Analyze, SIMATIC Logon, version control, audit trail, distributed systems. Manager: Thomas Balanant at Thomas.balanant@biogen.com.

Senior Automation Software Engineer CSV

CSL Behring | Lengnau BE, Switzerland

CSL Behring now ThermoFisher Scientific - Senior Automation Software Engineer CSV (February 2021 – October 2021) - Lengnau BE, Switzerland. Part of PCS/MES team executing Control System Validation procedures. Developed automated validation workflows from FAT to SAT through IQ/OQ/PQ stages. Implemented secure integrations between SIMATIC PCS 7 PCS and SIMATIC IT eBR MES. Created testing automation procedures for validation efficiency. Managed configuration changes in version-controlled environment. Ensured compliance with CSV and GAMP5 requirements. The Lengnau site transferred from CSL Behring to Thermo Fisher Scientific in October 2021. Technologies: SIMATIC PCS 7, SIMATIC IT eBR, CSV frameworks, validation automation tools, version control. Manager: Patrick Krumm at Patrick.krumm@thermofisher.com.

Senior Automation Software Engineer

Johnson & Johnson | Limerick, Ireland

Johnson & Johnson - Senior Automation Software Engineer (November 2020 – February 2021) - Limerick, Ireland. Obsolescence resolution project for GMP-validated lens fabrication line. Created Change Request documentation according to GAMP5 standards for validated systems. Developed and executed automated Test Plans for system upgrade validation. Managed integration of multiple controllers including SIEMENS PLCs, ROCKWELL PLCs, MITSUBISHI and OMRON Robots. Implemented barcode reader upgrade with minimal production disruption. Integrated Cognex vision systems with existing automation infrastructure. Technologies: SIEMENS PLCs, Rockwell PLCs, Cognex Vision Systems, GAMP5 validation framework, automated testing, system integration.

Senior Automation Software Engineer

Eli Lilly | Cork, Ireland

Eli Lilly - Senior Automation Software Engineer (April – November 2020) - Cork, Ireland. IE43 T2 Project for new filling machine automation system. Implemented distributed control system with multiple Rockwell CompactLogix PLCs. Developed FactoryTalk SE plus ME SCADA system with SQL Server backend for production data. Executed Source Code Reviews SCR according to Lilly Quality Standards. Integrated Staubli Robot Arm and Cognex vision system into production line. Managed CSV process from FAT through SAT stages. Built automated data collection and reporting workflows. Technologies: Rockwell CompactLogix, FactoryTalk SE/ME, SQL Server, Staubli Robotics, Cognex Vision, CSV procedures, source code review, automated data collection.

Senior Automation Software Engineer Vision R&D;

Crest Solutions | Cork, Ireland

Crest Solutions Ltd, Abbott S57 Project - Senior Automation Software Engineer Vision R&D; (September – December 2019) - Cork, Ireland. R&D; Vision Department automation development. Designed and developed automation software from scratch following structured development lifecycle. Implemented Rockwell Automation Studio5000 plus FactoryTalk SCADA system. Integrated Cognex Insight 5000/7000 camera systems with PLC controllers. Developed RFID tracking system integration. Created comprehensive technical documentation from Functional Description through FAT commissioning. Technologies: Rockwell Studio5000, FactoryTalk, Cognex Insight cameras, RFID systems, SQL Server, R&D;, vision systems.

Senior Automation Control System Engineer

Müller UK & Ireland | Market Drayton, United Kingdom

Müller UK & Ireland - Senior Automation Control System Engineer (December 2017 – August 2019) - Market Drayton, United Kingdom. Led modernization project upgrading obsolete Siemens S5 systems to TIA Portal (CIP Upgrade Project). Performed reverse engineering and system migration for legacy industrial systems. Developed custom .NET Core microservices for MES database integration. Built ASP.NET web interfaces for real-time production monitoring and recipe management. Implemented Wonderware InTouch SCADA on ArchestrA platform. Created automated data collection workflows using Wonderware System Platform and SQL Server. Designed SQL Server database schemas for manufacturing data analysis and recipe management. Developed Python scripts for data transformation and system health monitoring. Managed deployment pipelines from development through production validation. Technologies: Siemens S5/S7/TIA Portal, Wonderware InTouch, ArchestrA, .NET Core, ASP.NET, C#, MS-SQL Server, Python, JavaScript, System Platform, WinCC OA, reverse engineering, data analysis, microservices, web development.

Software Project Manager PLC/HMI/Robot

Valiant TMS GmbH | Saarlouis, Germany

Valiant TMS GmbH - Software Project Manager PLC/HMI/Robot (August – December 2017) - Saarlouis, Germany. FORD C519 Project: site commissioning co-supervisor managing software changes on the new model implementation in existing lines plus newly built lines. Led PLC and Robot programmers across approximately 400 robots (KUKA KRC2 and KRC4) and around 50 Allen-Bradley RSLogix 5000 PLCs with PanelView HMIs. Software managed a large arsenal of motion controllers for conveyor systems, plus spot/stud/arc welding and gluing controllers, applying FORD DCP standards. Technologies: Allen-Bradley RSLogix 5000, FactoryTalk, PanelView, KUKA KRC2/KRC4, motion controllers, welding controllers, FORD DCP standards.

Software Control System Engineer

TeamTechnik GmbH | Stuttgart, Germany

TeamTechnik GmbH TESLA Model 3 Drive Unit Project - Software Control System Engineer (January – July 2017) - Stuttgart, Germany. Commissioning and deployment of 11 identical automated drive-unit bench-test machines for TESLA. Implemented standardized deployment procedures across multiple machines using CI/CD-like approach. Commissioned and tuned Rockwell ControlLogix PLCs with Kinetix 5500 motion controllers. Performed servo axis commissioning and optimization for 33 total servo axes. Developed custom communication AOI using .NET Core for PLC-MES data exchange. Implemented OPC communication protocols for real-time production data collection. Created automated testing procedures for motion control validation. Technologies: TESLA, Kinetix 5500, Rockwell, ControlLogix, RSLogix5000, motion control, servo, AOI, MES, .NET Core, OPC, automated testing, standardized deployment.

Software Control System Engineer

Medtronic | Galway, Ireland

Medtronic - Software Control System Engineer (September 2016 – December 2016) - Galway, Ireland. R&D; Equipment Software Standardization Team member. Developed standardized software architecture following ISA88-TR88.00.02 PackML guidelines. Implemented reusable software modules for equipment automation using modular design principles. Created C# .NET Core automation tools for software development workflow automation. Built Python-based computer vision inspection applications using OpenCV. Integrated vision systems with .NET Core services for equipment validation and quality control. Developed automated testing frameworks for software validation

procedures. Managed version control and deployment processes for standardized equipment software. Technologies: Rockwell, RSLogix5000, FactoryTalk, ISA88, PackML, C#, Python, OpenCV, R&D; .NET Core, automated testing, version control, modular design.

Control System + Robot & Vision Project Manager

Woelco GmbH | Stuttgart, Germany

Woelco GmbH - Control System + Robot & Vision Project Manager (January – August 2016) - Stuttgart, Germany. Full project lifecycle management from design through commissioning. Designed complete automation solution architecture from scratch. Developed Functional Description documentation for system requirements. Programmed and integrated Staubli SCARA robot with Bosch PLC. Calibrated and integrated Cognex vision system with three InSight 5000 cameras and two barcode readers. Implemented robot-vision coordinate system calibration for precision pick-and-place. Developed palletizer/de-palletizer application with quality inspection workflow. Also worked with Rockwell CompactLogix plus PanelView/FactoryTalk, four Rockwell PowerFlex 525 drives, and four stepper motors via AMCI controllers. Technologies: Staubli SCARA, Bosch PLC, Cognex vision system, Rockwell CompactLogix, FactoryTalk, PowerFlex 525, AMCI, palletizer, pick and place, quality inspection, project management.

ICSS Engineer

Alstom Power GmbH | Mannheim, Germany

Alstom Power GmbH - Instrument & Control Safety System ICSS Engineer (January – December 2015) - Mannheim, Germany. Gas Turbine control system software design and development. Designed and developed control software from Functional Description through commissioning. Implemented GE Mark V I-Dos & HMI systems and GE Mark VI controllers. Developed SIEMENS PCS7 control systems for power plant auxiliary systems. Commissioned new auxiliary systems (Purge Credit, WLNOx with Water Injection) on a GE Frame 9E Gas Turbine at the CSEPEL Power Plant in Budapest. Implemented LC III conversion and IBH system at an Abu Dhabi power plant. Managed deployment procedures for mission-critical power generation systems. Technologies: GE Mark V (I-Dos, Speedtronic), GE Mark VI, SIEMENS PCS7, Siemens S7, WinCC, gas turbine, power plant, Budapest, Abu Dhabi, SCADA, mission-critical systems.

ICSS Commissioning Engineer

Sase Group S.r.l. | Russia

Sase Group S.r.l. - Instrument & Control Safety System ICSS Commissioning Engineer (September – December 2014) - Russia. Control system commissioning and validation in Russian power facilities. GAZ-PROM Vuktylskaya (Siemens SGT-600): Modified Siemens PCS7 Gas Turbine controller software for three units, engaged via Ethos Energy. SULZER Dzerzhinsk: Executed scheduled outage maintenance on Siemens Teleperm controller for Sulzer Russia, engaged via Spencer Ogden Energy. Performed system validation, redundancy checks, and network diagnostics. Conducted servo valve calibration and LVDT validation procedures. Technologies: Siemens PCS7, Siemens Teleperm M, SGT-600, gas turbine, Russia, GAZ-PROM, SULZER, distributed control systems.

Software Developer (hackathon)

Unicredit Appathon | Milan, Italy

Unicredit Appathon 2014 (one-off hackathon) - Software Developer (June 2014) - Milan, Italy. Member of the "Uniteam" team as software developer. Developed a cross-platform hybrid mobile banking app from scratch in 24 hours using HTML5, CSS3, JavaScript, jQuery and PhoneGap. Result: 13th out of 35 teams. Technologies: HTML5, CSS3, JavaScript, jQuery, PhoneGap, hybrid mobile development, hackathon.

Automation Project Engineer

Rio Tinto Alcan | Zurich, Switzerland

Rio Tinto Alcan - Automation Project Engineer Software (December 2012 – August 2014) - Zurich, Switzerland. Software design and deployment for aluminum manufacturing facilities. Project 1 RTA Dunkerque France: Designed safety PLC software from scratch following IEC 61131-3 standards. Developed Siemens S7-400 Safety CPU application for gas supply control system. Created HMI application with Simatic Manager and WinCC Flexible. Executed on-site deployment and commissioning at the Dunkerque facility and developed the user manual for the final user. Project 2 Carbon coke handling system, Canada: Developed Functional Description. Programmed Allen-Bradley ControlLogix PLC using RSLogix5000. Developed FactoryTalk SE SCADA interface. Implemented virtual

commissioning environment using RSEmulate5000 for pre-deployment testing, with a simulation PLC emulating site conditions before physical deployment. Managed remote deployment procedures from Switzerland to the Canadian facility. Technologies: Siemens S7-400 Safety, Simatic Manager, WinCC Flexible, Allen-Bradley ControlLogix, RSLogix5000, FactoryTalk SE, RSEmulate5000, virtual commissioning, IEC 61131-3, aluminum, mining, Dunkerque, Canada.

Maintenance Lead Engineer

Ambrosetti Ruote SA | Manno / Lugano, Switzerland

Ambrosetti Ruote SA - Maintenance Lead Engineer Automation (March – November 2012) - Manno / Lugano, Switzerland. Modernization project leader for automotive rim-manufacturing automation. Evaluated existing automation systems and identified optimization opportunities. Led the maintenance team implementing continuous improvement initiatives. Upgraded and enhanced PLC and Robot controllers including Siemens S5 (95U, 115U) and S7 (200/300), Mitsubishi, Beckhoff, Omron CJ1/2, and ABB IRC5. Worked with SEW MoviTrac motion, Siemens MicroMaster 440, Lenze drives, CLOOS weld controllers, and vision systems. Reference: Mr Claudio Brusco, Maintenance Manager. Technologies: Siemens S5/S7, Mitsubishi, Beckhoff, Omron, ABB IRC5, SEW, MicroMaster, Lenze, CLOOS, vision, maintenance, modernization, continuous improvement.

Gas Turbine Control System Engineer

Sase Group | Budapest, Hungary

Sase Group - Gas Turbine Control System Engineer (January – February 2012) - Budapest, Hungary. Control system inspection and validation at the ALPIQ CSEPEL II Power Station during a Gas Turbine scheduled outage. CSEPEL Power Plant: GE Speedtronic Mark V I-Dos, system delivered 1999, with three Mk V I-Dos controllers and four operator stations. Executed system inspection and audit, ArcNet LAN check, redundancy validation, power supply checks and readjustment. Validated servo valves (currents, coil redundancy) and LVDT sensors (condition, voltages). Provided technical support for spare I-Dos PC installation in an MS-DOS environment. Technologies: GE Mark V, Speedtronic, I-Dos, gas turbine, Budapest, ArcNet, LVDT, redundant control systems, industrial networks.

Automation Control System Project Manager

New Energy S.r.l. | Settimo Torinese / Torino, Italy

New Energy S.r.l. (New Energy Impianti) - Automation Control System Project Manager (January 2010 – December 2011) - Settimo Torinese / Torino, Italy. Project management and technical leadership for diverse automation projects, acting as field engineer or office-based PM as needed. Settimo Torinese Italy: Designed and commissioned a pen-manufacturing assembly machine using Schneider Electric M340 PLC with UnityPro IDE. Pilkington Glass / Settimo Torinese Italy: Commissioned ABB IRC5 robot serving an Engel horizontal extrusion press, using ABB RobotStudio 5.13 for offline programming and simulation, paired with Allen-Bradley RSLogix5000. Al Rasheed Power Plant Baghdad Iraq: Commissioned Siemens SGT-800 Gas Turbine with PCS7 DCS; designed/developed/commissioned Omron CJ1 PLC for fuel-oil auxiliary systems, SYMAP controller PMS for the Black-Start diesel generator. COBO Oil-Rig Angola offshore for Petromar: Served as ICSS engineer on platform with Siemens S5 PLCs, Siemens Teleperm M DCS, Triconex ESD controller, and Bently Nevada 3500 vibration monitoring for Mark V LM2500 GT generator. Technologies: project manager, Schneider Electric M340, UnityPro, ABB IRC5, RobotStudio 5.13, Allen-Bradley RSLogix5000, Siemens PCS7, SGT-800, Omron CJ1, SYMAP/PMS, Siemens S5, Teleperm M, Triconex, Bently Nevada 3500, Iraq, Angola, offshore, oil & gas.

ICSS Project Manager

GS Automation S.p.A | Roma, Italy / Congo offshore

GS Automation S.p.A - Instrument Control Safety System ICSS Project Manager (January – December 2009) - Roma, Italy / Congo offshore. Project management for Oil & Gas platforms and power generation systems in Africa. ENI Congo Kitina Oil-Rig (for RENCO): Modified GE-Fanuc 90-70 PLC logic (Proficy Machine Edition) for gas appoint and booster compressor, interfaced with ABB Infi90 DCS using Harmony IDE. ENI Congo Awa-Paloukou Platform: Developed Emerson DeltaV DCS software implementing a daily gas counter system. SAIPEM Awa-Paloukou Maintenance: Performed instrument calibration for temperature, flow, pressure, level transmitters and weight, validated DCS logic vs P&IDs; validated ICSS vs C&E; matrix, managed Emerson DeltaV with SIL-2 modules for ESD and F&G; systems. Unit 420 Commissioning: Heating-gas system for a SOLAR turbine generator. Unit 520 Commissioning: Sea-water treatment with hypochlorite system, modified Siemens PLC logic to restore auto mode. Kitina Platform Survey: Validated ICSS vs Cause & Effect matrix, ESD and F&G; systems (ICS-Triplex +

GeneralMonitors). Foukanda Platform Survey: ICSS validation with Allen-Bradley RSLogix 5000 PLCs and RSView32 HMI. Earlier 2008 ICSS engagements: Belayim Petroleum / Petrobel Egypt (PMS design, development, installation, commissioning for an 11 MW gas-turbine power plant with 11 Nuovo Pignone GT, load sharing/shedding via 400 hardwired I/Os); Hassi Berkine Algeria SCADA supervision commissioning at a 1.1 MW gas-turbine power plant (3 Nuovo Pignone GTs, Hybrid Foxboro P6009 TDS SCADA, 3000+ I/Os). Technologies: ENI, Congo, Egypt, Algeria, offshore, GE-Fanuc 90-70, ABB Infi90 Harmony, Emerson DeltaV SIL-2, SAIPEM, ESD, F&G;, ICS-Triplex, GeneralMonitors, Allen-Bradley RSLogix5000, RSView32, Foxboro P6009, SYMAP/PMS, oil & gas, instrumentation.

Control System & Robot Engineer

Gaiotto Automation S.p.A. | Modena / Vaiano Cremasco, Italy

Gaiotto Automation S.p.A. - Control System & Robot Engineer (January 2007 – August 2008, also briefly Oct 2008 – Feb 2009 as freelance) - Modena / Vaiano Cremasco, Italy. Software development and commissioning for ceramic manufacturing. Designed and developed software for Siemens S7-300 PLCs and WinCC Flexible HMI. Programmed KUKA KRC2 robot controllers. Commissioned robotized material handling islands at the Hatria ceramic factory in Teramo Italy. Also Elves Italia / New Holland: PLC Siemens S300 SAFE with VIPA HMI, COMAU arc-welding robot for tractor cabin Body & White, ProfiSAFE safety bus and laser scanner safety commissioning at New Holland Modena. References: Domenico Ghilardi (Account Manager); Marco Nolli (Robotic PM). Technologies: Siemens S7-300, S300 SAFE, WinCC Flexible, ProfiSAFE, VIPA HMI, KUKA KRC2, COMAU, robotics, ceramic, material handling.

Sales Manager

Alpina Industriale S.p.A. | Asti, Italy

Alpina Industriale S.p.A. - Sales Manager (June 2007 – February 2008) - Asti, Italy. Supplier of automation and robotics lines for brick industries worldwide. Maintained relationships with existing and new clients and followed ongoing projects. IGM Ciclana Cerje Tuzno d.o.o., Serbia: project to modify automation logics (Siemens + Fanuc Robot) at a brick-manufacturer site. SVANHOLM Holding S.A., Örebro, Sweden: ACC (Autoclaved Aerated Concrete / Gasbeton) technology evaluation and acquisition for Alpina Industriale, including proposal-study trips to Sweden. Reference: Miss Lucia Di Maio (Account Manager). Technologies: sales, brick industry automation, Siemens, Fanuc robot, Serbia, Sweden, ACC technology.

Tecnico Programmatore

MAEET2 SRL | Turin, Italy

MAEET2 SRL - Tecnico Programmatore (November 2006 – May 2007) - Turin, Italy. PLC/HMI/SCADA and Robot programming; CAD designer on ROBCAD, IGRIP, Visual Components. Consultant at COMAU System Borgaretto on ROBCAD/IGRIP. Commissioning of the COMAU South Africa BR204 line for Daimler Chrysler (East London, South Africa) over 6 months. Polish project: robotized quality-inspection line with Siemens S7-300 and KUKA Robot. Technologies: ROBCAD, IGRIP, Visual Components, COMAU, Siemens S7-300, KUKA, Daimler Chrysler, South Africa, offline programming.

Tecnico di Processo

OMG SRL | Givoletto, Italy

OMG SRL - Tecnico di Processo (Thermoplastic Sector) (February – October 2006) - Givoletto, Italy. PLC/HMI/SCADA programming and electrical design (SPAC). Commissioning of a plastic-container manufacturing machine in Dubai, UAE, at Interplast Co. Ltd., for the thermoplastic food industry, with Omron PLC/HMI and Indramat & Yaskawa motion. Technologies: Omron, PLC, HMI, SCADA, Autocad SPAC, Indramat, Yaskawa, thermoplastic, Dubai, UAE.

Sales & Customer Care Manager

Visual Components Italia | Turin, Italy

Visual Components Italia (Visual Components Oy, Finland) - Sales & Customer Care Manager (November 2004 – December 2006) - Turin, Italy. Italian-market development for a Finnish DES (Discrete Event Simulation) software house, fully self-managed both technically and commercially. 18 months of full-time activity resulting in 12 licences sold in Italy. Customer training, technical pre-sales, solution architecture, back-end development/customization, marketing. Key clients acquired: COMAU, SARMAS, SIMPRO, SACMI, INCAS. Selected projects: COMAU Welding Systems Borgaretto (BR204 Daimler Chrysler, commissioning of KUKA KRC2 robotized line in East London South

Africa); OMG Givoletto (thermoplastic for food, electrical design Autocad SPAC, PLC/HMI Omron, Indramat & Yaskawa motion, commissioning in Dubai UAE); MAEET2 Turin (Siemens S7 commissioning of underbody welding cell at Potenza Italy); SARMAS Agliè (3D simulation of AGV layout for Mercedes NCV3); SIMPRO Brandizzo (3D simulation for IVECO power-train line); SACMI Imola (3D/robotic simulation consultancy); COMAU Borgaretto (ROBCAD consultancy on Mercedes BR204, new concept FIAT/TOFAS line simulation). Technologies: Visual Components 3DCreate, discrete event simulation, ROBCAD, sales, technical pre-sales, training, COMAU, KUKA, Mercedes, IVECO.

Key Account Manager Automotive Automation

Akka Italia (Akka Technologies) | Turin / Orbassano, Italy

Akka Italia s.r.l. (Akka Technologies) - Key Account Manager Automotive Automation (January 1999/2000 – August/October 2004) - Turin / Orbassano, Italy. Started as Technician, progressed to Technical Leader, Project Manager and Account Manager (from early 2004). Managed approximately 35 engineers across multiple COMAU automotive automation projects, with business of about €2M/year; the Italian Business Unit closed in 2005 due to economic difficulties of the COMAU group. ABB Beauchamps near Paris France (6 months): ROBCAD designer/developer to validate Body & White fixtures, pneumatic and electric resistance-welding guns, handling grippers (Mercedes W251, Ford Amazon). Volvo Gent Belgium (6 months): software designer on ABB SAT Line PLC, in the Steelweld design office in Breda NL then on-site at Volvo Gent for project P13. COMPUTHERM Turin: embedded C development for temperature sensing on a Rabbit-based microprocessor system. COMAU project J3200 Opel Epsilon (Vectra) (2 years): PM managing 15 people across three sites (COMAU Borgaretto IT, Opel Russelsheim DE, Vauxhall Ellesmere Port UK), used IGRIP for B&W; layout simulation and offline programming for 200+ Fanuc robots, on-site startup and commissioning. Goodyear Danville Virginia USA NG99 (6 months): software design and commissioning for 11 COMAU C3G+ robots with integrated TI505 PLCs, developed communication protocols with the master line PLC, followed the project to Izmit Turkey, Sava Slovenia, Luxembourg. PICO Detroit USA (2 months): team leader for FANUC RJ2 robot programming on a GM project. Technologies: COMAU, automotive, project manager, ROBCAD, Delmia IGRIP, simulation, FANUC RJ2, ABB S4/SAT Line, KUKA, TI505, embedded C, Rabbit, Goodyear, Opel, Mercedes, Ford, Volvo, offline programming.

PLC Programmer

Auconel s.r.l. | Collegno / Turin, Italy

Auconel s.r.l. - PLC Programmer (July – December 1999) - Collegno / Turin, Italy. First-tier supplier to the Pirelli Tire industry; hired as a contractor during peak demand for Siemens PLC and HMI/SCADA control-system design. Pirelli Settimo Torinese Italy (4 months): Designed Siemens S7-300 PLC software, Siemens OP17 HMI (Protocol), Siemens FM354 axis control card; commissioned the Rubber Laminate Extrusion Line and Rubber Circles Line. Turk Pirelli Izmit Turkey (2 months): Designed Siemens S7-400 PLC software with Profibus fieldbus and Siemens OP35 HMI (Protocol); commissioned the Rubber Laminate Extrusion Line. Technologies: Pirelli, tire industry, Siemens S7-300/400, Profibus, Protocol, FM354, rubber, extrusion, Turkey, motion control.

Robotics Technician

HYSYS s.r.l. | Lissieu, France / Turin, Italy

HYSYS s.r.l. (then merged into Akka Technologies) - Robotics Technician (January 1998 – June 1999) - Lissieu, France / Turin, Italy. Robot plus PLC/HMI commissioning across European clients. Renault Sandouville France (4 months): robot programmer, offline programming in ROBCAD plus on-site commissioning of robotic islands with ABB S4 robots for project R84 (Laguna), Body & White. Volkswagen Bruxelles Belgium (6 months): robot programmer for online commissioning of robotic islands with KUKA VKRC1 robots on project S5 (Golf), Body & White. Technologies: ROBCAD, ABB S4, KUKA VKRC1, robotics, offline programming, Renault, Volkswagen, Body & White.

Software Designer

Euroservice s.r.l. | Collegno, Italy

Euroservice s.r.l. - Software Designer (January 1996/1997 – June 1998) - Collegno, Italy. PC-platform software development in Microsoft Visual Studio (VB6) to interface Cognex Vision Systems to COMAU robot controllers. Robot, PLC, HMI/SCADA and NC controls software design/commissioning. Carrier, Villasanta (Milan, Italy): Cartesian palletizer robot with Siemens SINUMERIK 705 NC controller (later S7-300 + SINUMERIK 805); software revamping of a metal-sheet bending press governed by Siemens 115U S5 (953 CPU) with Siemens WF723 motion-control card. TOFAS, Bursa (Turkey): commissioning of a robotized CO2/arc welding island for the FIAT PALIO project, with

COMAU C3G+ Arc Application, software in PDL2 (Pascal) developed for spec compliance. COMAU Robotica, Beinasco (Italy): design/development/commissioning of Cognex Vision System integration with COMAU robot, including the communication protocol between PC and robot controller. Technologies: Visual Basic 6, Cognex, COMAU C3G+, PDL2, Pascal, Siemens SINUMERIK 705/805, Siemens S5/S7, WF723, vision systems, NC.

Control System Technician

Seram s.r.l. | Alpignano, Italy

Seram s.r.l. - Control System Technician (January 1995/1996 – December 1996) - Alpignano, Italy. Hired initially as an Electrical Designer (EPLAN schematics), later as a software developer for PLCs (Siemens S5, Allen-Bradley series 40, GE-Fanuc 90-30 & 90-70 with LM90). Pininfarina S.p.A., Grugliasco (Italy) (6 months): Project Peugeot 406 Coupé, body welding line commissioning with five GE-Fanuc PLCs (90-30/90-70), SCADA HMI on XYCOM with LOGOVIEW. ITCA S.p.A., Grugliasco (Italy) (1 year): design and commissioning of a body welding line for Nanjing Motor Company (China), with Siemens S5 PLC, Siemens OP35 HMI (Protool) and SCADA in Protool. Technologies: EPLAN, Siemens S5, Allen-Bradley, GE-Fanuc 90-30/90-70, LM90, XYCOM LOGOVIEW, Protool, body welding, Pininfarina, Peugeot, Nanjing, China.

Avionic Technician

N.A.T.O. AWACS | Geilenkirchen, Germany

N.A.T.O. AWACS - Avionic Technician (1989 – December 1994/1995) - Geilenkirchen, Germany. NATO-component avionic technician specialized in Environmental Control Systems (ECS) on the Boeing 707 E3-A AWACS aircraft, working in the maintenance department for approximately 5 years. International military cooperation and complex aircraft systems maintenance. Technologies: Boeing 707 E3-A AWACS, Environmental Control Systems ECS, avionics, NATO, aircraft maintenance.

Aeronautic / Avionic Technician

Italian Air Force | Trapani, Italy

Italian Air Force (Aeronautica Militare Italiana) - Aeronautic / Avionic Technician (October 1982 – 1989) - Italy. Crew Chief and Avionic Technician after Air Force Academy training. Qualified on SIAI Marchetti 208, Aermacchi MB326 and MB339 aircraft. Posting: Trapani, Sicily. Additional qualifications: Crew Chief, Liquid-Oxygen Specialist (Ossigenista), ECS specialist (NATO). Technologies: SIAI Marchetti 208, Aermacchi MB326, MB339, avionics, crew chief, liquid oxygen, aircraft maintenance, military aviation.

EDUCATION & TRAINING

Formal education: 1979–1981 Liceo Artistico Renato Cottini, Turin Italy - Art high school, two years completed. October 1982 – June 1984 Italian Air Force Academy (Accademia Sott.li AMI), Caserta Italy - Specialista Montatore Aeronautico (Electromechanical Aviator), basic training on avionic systems, hydraulic and pneumatic systems, aerodynamics, armament, safety and rescue systems, electronic systems, and aircraft mechanics; classroom plus airfield hands-on with training aircraft (equivalent to a BSc-level Diploma in Electromechanics). September 1985 – June 1987 ITCS Salvatore Calvino, Trapani Italy - evening course, Sezione Programmatori (Computer Programmers section), 3rd year. September 1997 – June 1998 ITIS Amedeo Avogadro, Turin Italy - evening course, Informatica.

Italian Air Force Academy - Electromechanical Aviator / Specialista Montatore Aeronautico (October 1982 – June 1984) - Caserta, Italy. Military technical training in electromechanical systems for aviation: avionic systems, hydraulic and pneumatic systems, aerodynamics, armament, safety and rescue systems, electronic systems, and aircraft mechanics. Equivalent to a BSc-level Diploma in Electromechanics.

Italian Air Force English Language School - Specialised Military English (January – December 1984) - Rome, Italy. Specialized English-language training for the military aviation context.

Italian Air Force Operation Base - Aermacchi MB326 Crew Chief (June – September 1985) - Galatina, Italy. Technical training and qualification as crew chief for Aermacchi MB326 aircraft maintenance and operations.

Italian Air Force Operation Base - Liquid Oxygen Specialist / Ossigenista (June – August 1986) - Porto S. Stefano, Italy. Specialized training in liquid oxygen systems for aircraft support and safety.

N.A.T.O. E3-A AWACS Main Operating Base - Boeing 707 E3-A/AWACS ECS Environmental Control System (October 1989 – December 1990) - Geilenkirchen, Germany. Advanced NATO training on the Boeing 707 E3-A AWACS Environmental Control System, international military cooperation and complex aircraft systems maintenance.

REGULATIONS & STANDARDS

Expert knowledge in industrial regulations and standards: Quality Standards including GAMP5 Good Automated Manufacturing Practice, GxP regulations, GMP Good Manufacturing Practice. Industrial Standards including IEC 61131-3 for PLC programming, ISA-95 Enterprise-Control System Integration, ISA88-TR88.00.02 PackML Packaging Machine Language. Validation Protocols including CSV Computer System Validation, FAT/SAT procedures, IQ/OQ/PQ documentation and execution, Lilly Quality Standards (SCR - Source Code Review). Safety: SIL-2 modules (ESD / F&G;), ProfiSAFE, Cause & Effect (C&E;) matrix validation.

INDUSTRIES & GLOBAL EXPERIENCE

Extensive experience across multiple industries worldwide: Pharmaceutical & Medical Devices including Lonza, Biogen, CSL Behring/ThermoFisher, Medtronic, Johnson & Johnson, Eli Lilly, Abbott, SKAN with expertise in GMP, GAMP5, CSV validation. Automotive including COMAU, Mercedes, Ford, Opel/Vauxhall, Volkswagen, Renault, TESLA, Volvo with robotics and assembly line (Body & White) automation. Rubber & Tire manufacturing including Pirelli and Goodyear. Food & Dairy processing at Müller and OMG thermoplastic for food. Brick & Ceramic including Alpina Industriale (brick), Hatria and Gaiotto Automation (ceramic). Glass industry at Pilkington. Oil & Gas platforms including ENI Congo offshore platforms (Kitina, Awa-Paloukou, Foukanda), SAIPEM Congo, Petromar Angola COBO oil-rig, Petrobel Egypt Belayim, with safety systems and ICSS. Power Generation including Alstom Gas Turbines (GE Mark V/VI), Siemens SGT series, Power Plants in Budapest, Iraq, Abu Dhabi, Hassi Berkine Algeria, GAZ-PROM and SULZER Russia. Mining & Aluminium at Rio Tinto Alcan (Dunkerque France and Canada). Aeronautic at the Italian Air Force (SIAI Marchetti 208, Aermacchi MB326/MB339) and NATO AWACS (Boeing 707 E3-A). Global project delivery across Italy, Switzerland, Germany, France, Belgium, Netherlands, UK, Ireland, Luxembourg, Sweden, Serbia, Slovenia, Turkey, Russia, Hungary, Iraq, UAE, Egypt, Algeria, Angola, Congo, South Africa, USA (Virginia, Detroit, Houston), Canada, and China.