



M Sc EE, Royal Institute of Technology 1989

Summary

Ulf Enarsson has a long experience of all the steps involved in system development. Ulf have had various roles in his assignments, e.g. design, programming, troubleshooting, commissioning and customer support. The assignments have mainly been in the area of industrial IT, e.g. systems for process supervision and control, industrial robots and user interface applications. Ulf's assignments have mostly been within large organizations.

Experience

Branch of trade	Industrial IT for Robotics, Transportation, High Voltage Networks and Nuclear power
Activities	Analysis, design, programming, test, troubleshooting, commissioning, documentation, education
Application	User interface for train operators and maintenance operators, Bombardier. User interfaces, Man-Machine-Communication, Base software, communication software, application software etc. for ABB Robots. Distributed control systems for high voltage networks. Man-Machine communication application for follow-up regarding fuel efficiency for a nuclear power reactor.
Operating systems	Unix, Windows, VxWorks, Linux
Databases	Notes, SQL
Languages/ Methods/ Tools	C, C++, C#, Visual Basic, Tcl, Lotus Script, Qt Microsoft Visual Studio 6.0, Microsoft Visual Studio .NET 2003, Microsoft Visual Studio 2005, ATL COM, Lotus Domino, Bombardier MITRAC HMI Designer LabView

Prior Assignments

130902- **Bombardier Transportation** / Developer

Application development of a user interface for commuter train operators and maintenance operators. The Linux based HMI system is presenting information (diagnostic data and traffic data) for the operators operating the train. Development of the HMI application was carried out in a Linux environment using C++ and the Qt framework for realizing the user interface.

*110716-
130901* **Bombardier Transportation** / Developer

Application development of a user interface for high speed train operators and maintenance operators. The Linux based HMI system is presenting information (diagnostic data and traffic data) for the operators operating the train. Development of the HMI application was carried out in a Linux environment using C++ and the Qt framework for realizing the user interface.

*090415-
110715* **Bombardier Transportation** / Developer

Application development of a user interface for train operators and maintenance operators. The Linux based HMI system is presenting information (diagnostic data and traffic data) for the operators operating the train. Tool used for development of the HMI application was the HMI Designer product by Bombardier.

*090301-
090401* **Landstinget Västmanland** / Trouble shooter

Engaged for identifying solutions for remaining issues before taking a new version of a blod bank system (Prosang) into operation.

*030415 -
090215* **ABB Robotics** / Trouble shooter

Engaged by the product support team for customer related issues. Support for robot systems S4C, S4C+ and IRC5. Problems handled were related to base software and robot applications. Work included all the phases of solving the customer's problem, e.g. car production plant on-site investigations, software corrections, implementation of new functionality, system integration and test. Requires in-depth knowledge of robot systems and the applications used. Uses a wide range of tools during the investigation phase such as, network sniffers and even problem specific tools and debugging features which need to be built on site and incorporated in the base software for the robot. Environments used Visual Studio 6.0, Visual Studio .NET 2003 and Visual Studio 2005 for the various system releases. Target system is running VxWorks OS.

*021001 -
030215* **Cramo/Lappri** / Developer

Software development in Lotus Domino Designer. Development of functions for Cramo intranet, e.g. packages for address directory and conference room booking. Included e.g. connection to AS400-located databases, export of data from Lotus Notes to Excel, web based application for conference room booking.

*001210 -
020701* **ABB Robotics** / Developer

Software development of program package used for communication between a PC and controller of an industrial robot.

*981216-
001210* **ABB Switchgear** / Developer

Software development, test and commissioning of project regarding distributed control systems for high voltage networks. Testing included setting up of verification system where LabView was used for control of test equipment, and for evaluation of test results, e.g. display of charts and diagrams. Commissioning included parameter setting and configuration of protection and control terminals

regarding e.g. communication and protection behavior. Application programming using HiDraw to build up the protection and control logic within the terminals.

970401 - **ABB Network Partner** / Tester
981215

Responsible for integration and test of software modules for development project regarding distributed control systems for high voltage networks. Pre study of configuration tool using Sigma platform.

970516 - **Bromma Conquip** / Developer
970602

Software upgrade on Bromma Conquip CMS. A monitoring system for container lifting devices.

961201 - **ABB Robotics** / Developer
970510

Development of robot calibration system for production department.

960928 - **ABB Robotics** / Developer
970401

Development of new control software for industrial robots. Partial implementation of problem report database facility on Oracle. Helping hand to the system administration staff at ABB Robotics.

941202 - **ABB Atom** / Developer
960630

Development of Man-Machine-Communication applications for the software package CoreMaster2. CoreMaster2 is an off-line tool for pre-studies and follow-up regarding fuel efficiency for a nuclear power reactor.

930518 - **ABB Robotics** / Developer
941201

Development of Man-Machine-Communication applications and robot instructions for industrial robot systems.

890925 - **ABB Industrial Systems** / Developer
930501

Development of base software for realization of user interface for operator station ABB Advant.

Prior employments

<i>2001 -</i>	CENTUM
<i>2000 - 2001</i>	eQuality Solutions
<i>1996-2000</i>	CENTUM
<i>1993-1996</i>	Enator Mälardalen
<i>1989 - 1993</i>	ABB Industrial Systems

Other

Language

<i>Swedish</i>	Fluently. Native Language
<i>English</i>	Fluently. Used to have English as project language.

Travel availability

<i>Sweden</i>	Weekly basis.
<i>Outside Sweden</i>	Weekly basis.