PERSONAL INFORMATION

Corrado Ubezio

Milan, Italy

corerd@live.com

http://goo.gl/tvUXB

Sex Male | Nationality Italian

Mother tongue Italian

Other languages English, Portuguese

POSITION

Firmware / Software Designer

TECHNICAL SKILLS

Main

- Analysis and integration of complex hardware-software systems in interdisciplinary team.
- Design and coding of multi-process (thread) real time applications and drivers.
- Diagnostic applications to validate the software design.
- Real Time Operating Systems.
- Software design using object oriented methods (UML).
- Debug and Unit testing.
- Telecommunication algorithms and standards.
- ISO/IEC 7816 Smart Card standard.
- Cryptographic algorithms DES, AES, RSA.
- Web design using content management systems (CMS).
- Good verbal and written communication with a global interdisciplinary development team (software, digital and analogue hardware) regarding design reviews, code reviews, deliverables, project updates and issues.
- Good attitude in facing the end-customer in order to customize the offered system and ensure the quality of the software activities.

Application fields

- Embedded systems firmware.
- Firmware-controlled power management multi-phase switching regulator SoC.
- Semiconductor Technologies.
- Desktop applications targeting Linux, Mac OS X and Windows platforms.
- Mobile applications for Android and iOS devices.
- Image processing and computer vision applications.
- Home automation systems (domotics) integration.
- Security and data protection architectures in electronic fund transfer devices (PoS terminals).
- Web content management systems.
- Test and inspection applications.
- Developers training.

Computer skills

Languages	C/C++, C#, HTML+CSS, Java, JavaScript, Objective-C, Pascal, PHP, PowerShell, Python, SQL, Visual Basic, Unix shell, XAML.
Assembler	Intel 8051/251, Intel x86, Microchip, M68K, STM8, STM32, Z80.
Operating Systems	Android, iOS, Mac OS X, Linux, Windows, uClinux, uC/OS-II, VxWorks.
Middleware	AJAX, Cocoa, LAMP, jQuery, .NET, OpenCV.
Graphical User Interfaces	Android GUI, macOS Aqua, Bootstrap, iOS UI, Microsoft Foundation Class (MFC), Qt, Windows Form, Windows Presentation Foundation (WPF), wxWidgets .
DBMS	Informix, MySQL.

Web server	Apache.
CMS	WordPress
Network Management	Administration tools provided by Android, iOS, Mac OS X, Linux and Windows operating systems.
Communication protocols	Bluetooth, DLNA, GSM/GPRS/UMTS, Hdlc, ISO/IEC 7816, Tcp/Ip, UPnP, Wi-Fi.
Bus	AVS, BTicino SCS, CAN, I2C, ISA, PMBUS, RS232/422/485, SPI, USB.
Development environment	Android Studio, Code::Blocks, CodeLite, CodeWarrior, Eclipse, Mplab, NetBeans, Tornado Wind River, Visual Studio, Xcode.
Bug tracking and version control systems	MantisBT, GIT, Mercurial, SVN.
Processors	Arm, Freescale ColdFire, Intel x86, 8051 derivatives, Maxim crypto processors, STM8, STM32, Z80.
Microcontrollers	Freescale HCS08, Microchip, Renesas R8C, TDK 73S11xxF.
Electronic test instruments	In-circuit emulator, oscilloscope, logic analyzer, protocol analyzer, spectrum analyzer.

CASE HISTORY

2017 Cross-platform GUI applications for validation of multi-phase switching power regulator SoC.
Application fields Desktop, Power Management, Semiconductor Technologies, Test and inspection.

2015 Teamed up STMicroelectronics and Google developing an innovative isolated 48V resonant multi-phase direct power conversion architecture targeting efficiency improvement in data centre.
Application fields Embedded, Power Management, Semiconductor Technologies.

2012 Teamed up STMicroelectronics for developing the world's first multi-phase switching power supply regulator.
Application fields Embedded, Power Management, Semiconductor Technologies.

2011 Teamed up MR&D for developing a Nurse Call System using BTicino equipments
Application fields Embedded, Domotics.

2010 Teamed up CNR-IMM and MR&D for developing a rescue system for elderly people using computer vision techniques.
Application fields Computer vision, Desktop, Domotics, Mobile.

2009 Web sites development.
Application fields Web CMS.

2007 Design of a PIN entry device achieving the PCI approval as a PIN transaction security device.
Application fields Embedded, PoS terminals, Test and inspection.

2006 Design of a modular system consisting of multi PIC devices communicating over an SPI bus with a master.
Application fields Embedded, PoS terminals.

2005 Start-up of a PoS software development team in Fortaleza (Brazil).
Application fields Embedded, PoS terminals, Developers training.

2003 Porting of the 8/16-bit SDK for PoS terminal embedded applications to a 32-bit platform.
Application fields Embedded, PoS terminals.

2001 Development of the driver for a GSM/GPRS/UMTS module and integration in the SDK for PoS terminal embedded wireless applications.
Application fields Embedded, PoS terminals.

2000 Start-up of a PoS software development team in Madrid (Spain).
Application fields Embedded, PoS terminals, Developers training.

1999 Teamed up Slovenská Sporiteľňa Bank (Bratislava, Slovak Republic) for developing a PoS application that made the first international money transfer transaction with an EMV smart card (see Smart Card News June 1999 at page 116).
Application fields Embedded, PoS terminals.

1998 Coding of an embedded ISO/IEC 7816 smart card driver achieving the EMVCo approval for PoS terminals.
Application fields Embedded, PoS terminals, Test and inspection.

1997 Start-up of PoS software development teams in Bratislava (Slovak Republic) and Malta Island.
Application fields Embedded, PoS terminals, Developers training.

1996 Design a software development kit (SDK) for PoS terminals embedded applications.
Application fields Embedded, PoS terminals.

1995 Design and development of a PoS terminals remote control system, running on MS-DOS/Unix, in order to upload software updates, profiles, and perform helpdesk facilities for the terminals installed on field.
Application fields Desktop, Embedded, PoS terminals.

1994 Development of cryptographic algorithms (DES, AES, RSA) and secure protocols on an 8-bit processor platform.
Application fields Embedded, PoS terminals.

1993 Design of a real time embedded operating system running on an 8-bit platform for PoS terminals. Development of device driver, Electronic Funds Transfer (EFT) protocols over Public Switched Telephone Network (PSTN) for payment devices.
Application fields Embedded, PoS terminals, Test and inspection.

1992 Development of an embedded Optical Character Recognition (OCR) firmware to extract text from images taken on the fly by means of a video camera.
Application fields Embedded, Image processing.

1991 Reverse engineering development of BIOS for an on-board 32-bit processor running MS-DOS embedded applications.
Application fields Embedded, PoS terminals.

1990 Implementations of a point-of-sale (PoS) terminals RS485 network. The development involved both terminal adapters and router firmware.
Application fields Embedded, PoS terminals.

1989 Teamed up Autostrade per l'Italia and Olivetti to carry out the first Telepass drive-through automatic payment system. The development involved both the firmware of the devices installed in the car and the ones of the gate lanes in the toll station.
Application fields Embedded.

1987 Technical article writer for computer magazines.
Application fields Developers training.