



Gérard Gauthier [3erar gotie]

Senior Developer and Project Manager. In Embedded Systems for 20+ years. Involved In transnational projects requiring design and development skills, mainly in Human-Machine-Interfaces, Communications, and Energy Management

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WORK EXPERIENCE

AEG Power Solutions

Project manager, customer support, developer

2011-present, Chambray-lès-Tours, France

- Leader in **software** of controllers for industrial battery chargers, supports teams in France, Spain, the NL, Singapore, Dubai, China
- Project manager of 250 kW to 1 MW solar inverters in Warstein-Belecke, Germany
- Design of off-grid solar solutions in remote areas of 250+ kW stations shipped in Mali
- Introduction of **HTTPS**, **SPA webpages**, **TLS/SSH** security in embedded **Linux**
- Development of tools in **C#**, **Python**, **Powershell**. Expert in IEC 61850 and Profibus
- **PLC** project: **CoDeSys** & HTML/jQuery HMI

WORK EXPERIENCE

AEG Power Solutions

Designer, Developer

2010-2011, Plano, Texas

Developer and designer of **graphics** and **Human-Machine Interface** unit of high end modular solar inverters

WORK EXPERIENCE

AEG Power Solutions

Project Manager, Designer, Developer

1999-2010, Chambray-lès-Tours, France

- OSI-based protocol for Telefónica in **EC++** (Vitoria, Spain)
- OCX in **C++** for communications over TCP-IP/modems/serial links
- Expert in communication protocols
- Project leader in the development of embedded IP server: **HTTP**, **SNMP**, **Modbus** TCP, SMTP, NTP. **Multi-thread C** code ported on **WatTCP**, **µClinux**, **embedded Linux**
- Expert in Cable-TV monitoring. Designed a test bench for **HMS**-compliant interface (Bordon, England)

WORK EXPERIENCE

Object Technology

Product Designer

1996, Saint-Doulchard, France

- Voice-mail design (Internet message extension agent)
- HTML authoring and site setup and maintenance (sendmail, FTP, HTTPD, PPP, DNS...)

WORK EXPERIENCE

Scortec

R&D manager, designer, developer

1988-1996, Chambray-lès-Tours, France

- Introduced digital electronics in a company previously only in analog. Designed a fully functional LCD sign system based on a 68070 processor with a fast multi-task kernel, link capabilities (modems, EIA-485, Fiber Optics...) and foundation C library
- Manager of 4 people in the R&D
- Designed the company's communication foundation class in C++, based on MFC, Winsock Berkeley sockets ported on PC's and embedded systems as COM-compliant objects wrapping Windows Telephony API

WORK EXPERIENCE

Greta

Lecturer and teacher

1986-1988, Vendôme, France

- Basic course for employees with little or no data processing exposure.
- Introduction to computing and structured programming

STEM EDUCATION

- *Human Coders*, Paris, France 2016: **Angular**
- *Corporate in-house training* 2008: **PRINCE2** certificate (project management)
- *Valtech*, Paris, France 1997: Java/Corba/3-tier
- *3IL*, Limoges, France 1995-1996: **M.Sc in CS** with 1st class Honors, scored 620 at the **TOEFEL**
- *LEPT Henri Brisson*, Vierzon, France 1987-1988: **B.Sc** in Industrial Computing
- *CNAM*, Paris 1988-1993: certificates in algebra, signal processing, mathematics, electronics
- *Cambridge*, UK 1990: Certificate of English
- *Université Rabelais*, Tours, France 1982: degree in Psychology. Major: logic and linguistics, minor: ethology

EXPERTISE AND SIGNIFICANT EXPOSURE

- **TCP/IP**, **HTTP/S**, SMTP, FTP/S, SNTP, **SNMP**, **Modbus** **TCP**, **TLS/SSH**, LDAP agent development on embedded systems
- **C/C++**, **C#**, **Ecmascript**, **Python**, **VBA**, Powershell, **EC++**, **Lua**
- Portable C (host to embedded target), unit tests, technical documents, user manuals
- IDE: **Eclipse**, **Visual Studio Code**, **Visual Studio**, **Qt**
- Revision control: **GIT**, CVS/SVN, VSS
- Front end for embedded systems / **SPA**: vanilla **ES2015+CSS**, **Vue.js**, Node/**NPM**, Webpack
- Linux: **Archlinux**, **Debian** (Kubuntu...), **embedded Linux** (**Digi**), **µClinux**
- XML: **Schema**, **XPath**, **XSLT**

(CONTINUED), MISCELLANEOUS

- Industry protocols: **IEC 61850**, **MODBUS**, **Profibus**, **IRIG-B**...
 - State machines, coroutines, and continuations
 - Multitask kernels for embedded systems: **MQX**
 - MCU's: **ATmega**, Coldfire, C167
 - LF and digital electronics: **PSpice**, **KiCad**
 - Solar and hybrid systems, industrial battery chargers
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- Free and OSS tools: **Gimp**, **Inkscape**, **Typora**, **Libre Office**...
 - On slate: **TypeScript**, **Rust**, **elm**
 - Natural languages: English, French
 - Leisure, vistas: running, photography, overseas, reddit