

# 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

## @LabZDjee

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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

#### Scorted

## 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
- 3/L, 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
- Collaboration, SemVer: GIT, slack, CVS, VSS
- Front end for embedded systems / SPA: vanilla ES2015+/CSS, Vue.js, Node/NPM, Webpack
- Linux: Archlinux, Debian (Kubuntu...), eLinux (Digi), µClinux
- XML: schema (XSD), style (XSLT), XPath

## (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
- Free and OSS tools: Gimp, Inkscape, Typora, LibreCad, Libre Office...
- On slate: TypeScript, Rust, svelte
- Natural languages: English, French
- Leisure, vistas: running, photography, overseas, reddit