Jean-Christophe BERTHON

Over 6 years experiences in Computer Science
(5 years in the Space business)

Senior Solution Developer

Detailed CV at http://jcberthon.free.fr/Info/cv/cv.v2.en.html

SKILLS

Functional Skills

Space business
Monitoring and Control of Ground Stations
Image Quality:

Technical Skills

Systems	Servers: **Linux** (RedHat, IPCop, Mdk), UNIX (Solaris, HP/UX, DEC) Workstations: Linux, Windows, DOS Network: NTP, Samba, FTP, SNMP, NFS, firewall (iptables) Others: **GNU / Open Source** environment, VxWorks
DBMS	Oracle, Ms Access, Ingres
Languages	**C/C++**, **Tcl/Tk**, Prolog, LISP, HTML and CSS, Java, Shell (bash and ksh), Visual Basic, JavaScript, SQL, Caml, Assembly language (x86)
Products	**API**: SLE, Basic M&C, GTK+, MDAC (ADO, ODBC) **Software**: Eclipse, ArgoUML/Poseidon, MsOffice, CVS, tcpdump/ethereal, DataViews, ARCview (GIS), ARCserve, cscope, PhotoShop, The Gimp, md5

Method and associated tools

UML (ArgoUML/Poseidon), Real Time Software Design (CNAM), Merise (Silverrun).

MAIN REFERENCES

ESA/ESOC :	MCM4 – Ground Station Monitoring and Control
	STC2 – Ground Station Monitoring and Control
EUTELSAT :	GSMCS - Ground Station Monitoring and Control
CNES :	AST - Image Quality
	VIGRI – Image Quality

Icelandic Institute of Natural History: Laupur – Fauna and flora classification

EDUCATIONAL BACKGROUND

2005:	TMTCS developer training
2004:	SLE 2.0 API developer training
Since 2004:	Italian and German courses
2000-2003:	CNAM - 6 course credits validated in Computer Science, Conception and Development
1999:	Graduated of the French DUT in Computer Science

LANGUAGES

French: Native (mother tongue)
English: Fluent. Primary language at work. TOEIC total score: 755 (Sept. 1999).
Italian: Speaking and reading fluent. Adequate writing. Training: attending an Italian course
German: Basics. Training: attending a German course and living in Germany
Dutch, Icelandic: Notions

PROFESSIONAL EXPERIENCES

Since October 2000

Capgemini – Space Unit

Customers and work locations

- ESA/ESOC in Darmstadt (Germany): since June 2004
- Eutelsat partly in Paris (France): Sept 2002-May 2004
- CNES in Toulouse (France): Oct 2000-Aug 2002

Acquired experience

Ground Segments systems:
Nowadays, support ESA/ESOC for the MCM4 deployment in the ESTRACK network and for establishing the MCM4 helpdesk service. Moreover, study a solution for the replacement of the STC2 HMI software library.
Duties involved performing the acceptance of the MCM4 software on behalf of ESOC. In addition, conducted a code quality review for the MCM4 and TMTCS projects.
For Eutelsat, migrated GSMCS, a M&C system, to Linux, to maintain and to support (technical and functional) the new system during its deployment and first half a year of use.

Image Quality systems:
Before, developed under UNIX and Linux Graphical User Interfaces in Tcl/Tk or GTK for Image Quality tools. Worked on different stages of various projects (Specification, Preliminary and Detailed Conceptions, Coding, Single Instruction and Integration Tests, Validation, Acceptance, Maintenance and Evolution). Has acquired skills in the field of Image Quality (SPOT, Polder Satellites, etc.).

Linux system engineer:
Duties involved Linux clients or servers installation and maintenance, including network services (FTP, CVS, firewall, etc.) and backup configuration.

Technical env.

Linux, UNIX (Solaris, DEC OSF/1, HP-UX), C, C++, Tcl/Tk, Shell (bash, ksh), GTK+, CVS, tcpdump/ethereal, DataViews, cscope, md5, ssh, Ms Office

Main Projects Short Description

MCM4: The MCM4 software is a monitoring and control gateway between the electronic equipments and the M&C manager (the STC2).
GSMCS: This system is Eutelsat M&C manager. It monitors and controls 5 ground stations (over 35 antennas and 16 geostationary satellites). Controllers can quickly check the overall state of the stations or just a detailed view of a station/antenna.
AST: This is mainly an algorithmic tool. It is used to refine location points on satellite pictures. The algorithm is made of a matrix solving with Cholesky in co-ordination with least square (so the calculus is iterative). Equation settings are done entirely with the GUI.
VIGRI: It's a graphical tool allowing users to manage data grids (representing deformation of points in a satellite picture): grids display, distance and angle measure, etc.

Apr 1999-Aug 2000

Náttúrufræðistofnun Íslands (Icelandic Institute of Natural History)

Acquired experience

Worked on Ingres and Ms Access to create a database to be used by all the researchers of the institute to save their work. Created a graphical user interface with Visual Basic and based on A.D.O. allowing entering and reading data in a user-friendly way.
The software could export data to an external GIS to view the repartition of Icelandic species on maps.