

LEAHU Marius Constantin

Str. Traian Popovici, Nr.128A, Sector 3, Bucharest, Romania
marius-dot-leahu-at-gmail-dot-com

SUMMARY

More than 5 years of experience in software development, testing, and system administration.

EXPERIENCE

System Administrator and Software Developer

2004-11 – 2008-10

CERN, Geneva, Switzerland (Project Association with "Politehnica" University of Bucharest)

Worked in the ATLAS experiment at CERN (European Organization for Nuclear Research) as member of SysAdmin team and as software developer for the trigger and data acquisition system.

SysAdmin specific activities and achievements:

- Designed and implemented a network booting solution for flexible administration of a Linux test bed cluster (~100 nodes). Involved in the extension of this solution for the ATLAS online cluster (~1000 nodes to be extended to ~2500 nodes) with performance and robustness requirements specific to real time applications for data acquisition.
- Put in place tools required in the SysAdmin activity (project management, FAQ web sites, ticketing system).
- Gained hands-on experience in setting up Linux servers providing services like NFS/Samba file server, DNS and NTP relay, DHCP, BOOTP and PXE network booting, centralized authentication with OpenLDAP, tools configuration in LDAP, cluster monitoring with Nagios.
- User administration and support.

Software developer activity:

- Designed and implemented an application to enforce the Role Based Access Control model in the ATLAS Trigger and Data Acquisition software. Client-server architecture implemented in Java with extension in C++ for client API. Uses XACML standard for policy definition and client-server dialog. Currently in use in the ATLAS experiment: more than 1500 clients, cluster of 4 servers.
- Designed and implemented a solution to enforce the same access control model at the operating system level with Linux specific tools (sudo, PAM).

Software Engineer

2003-07 – 2004-08

Motorola - Freescale, Bucharest, Romania

11 months: Member of StarCore Test team.

- Involved in testing and validation of CodeWarrior for StarCore, Windows and Solaris editions.
- Tested the compiler, the IDE and the debugger using both automated and manual means.
- Designed, implemented and run tests scripts (makefile, perl, bash) for automated testing and reporting.
- Conceived and wrote test plans in a standardized form.
- Provided occasionally technical support to internal customers by email or phone.
- Involved in recruiting process for one position in our team.

2 months: Member of Compiler team.

- Shared my testing experience with development team.
- Field application engineer for 2 weeks on client site (Motorola PCS / Toulouse, France). Investigated customer's issues, provided workarounds where possible, reported problems to engineering and management, helped in deploying patches and products to client.

Internship

2003-02 – 2003-06

Motorola DSP Center, Bucharest, Romania

Prepared my graduation project (team project - 2 members) with the subject "*Compiler Test Suite and Benchmark for Embedded PowerPC Processors*":

- Designed and developed a compiler test suite to ensure that the compiler (Metrowerks C/C++ Compiler for Embedded PowerPC) generates legal instructions for the target processor and correctly disassembles a binary code.
- Designed and developed benchmarks for Netcomm and Automotive families of Motorola embedded processors: synthetic benchmarks and application-based benchmarks.

- Programmed in C and assembler (PPC) language with CodeWarrior IDE.

Programmer

2002-07 – 2002-12

ADL-Informatique, Bucharest, Romania

Developed a test tool for a C++ library which compresses/decompresses into/from JPEG image format.
Bug fixing and optimization of a set of library functions used in a kernel for industrial printers' controller.

EDUCATION

"Politehnica" University of Bucharest

2004 – present

Faculty of Electronics, Telecommunications and Information Technology

PhD thesis in progress in the area of software security

"Politehnica" University of Bucharest

2003 – 2004

Faculty of Automatic Control and Computers

Master degree in Computer Science – Advanced Systems for Internet Applications

"Politehnica" University of Bucharest

1998 – 2003

Faculty of Automatic Control and Computers

University graduate – Department of Computer Science and Engineering

COMPUTER SKILLS

Software Development

Programming Languages: C, C++, Java
Linux: shell scripting, makefiles
Web: HTML, PHP, JavaScript, XML, DTD
Networking: sockets programming
Databases: familiar with MySQL
Others: UML, CVS, VSS, SVN, Eclipse IDE, CodeWarrior IDE

Operating Systems

Administration of Red Hat Enterprise Linux distributions
Windows 2000/XP/Vista

Networking

Knowledge of LAN and WAN technologies and protocols

Office

Microsoft Word, Excel, PowerPoint, Visio
Familiar with Visual Basic programming

OTHER ACTIVITIES

Published work

"Access Control Design and Implementations in the ATLAS Experiment", Leahu, M.C.; Dobson, M.; Avolio, G.; Nuclear Science, IEEE Transactions on Volume 55, Issue 1, Part 1, Feb. 2008 Pages: 386 – 391

"Access management in the ATLAS TDAQ", Sloper, J.E.; Leahu, M.; Dobson, M.; Lehmann, G.; Nuclear Science, IEEE Transactions on Volume 53, Issue 3, Part 1, June 2006 Pages: 986 – 989

Training courses

ORACLE Identity Manager (one week workshop)	2007
Behavioral Interviewing Training at Motorola	2004
ORACLE Academic Initiative (certification)	2002
CISCO Network Academy (2 semesters)	2002

FOREIGN LANGUAGES

English: Advanced
French: Medium