

## SUMMARY

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A creative and motivated Engineer with 12 years of experience in development, integration, and system/network administration.

- A team leader, but very hands-on (“player/coach”).
- Excellent soft skills; good at eliciting explanations of customer needs and building meaningful use cases.
- Adapts quickly to unfamiliar environments and languages.
- Expert in Linux (15 years).
- Expert in Java (12 years).

## TECHNICAL SKILLS

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OPERATING SYSTEMS:	Hurd, Linux, Solaris 2.x, HP-UX 11, IRIX 6.x, Windows (NT, 2000, XP), MacOS X.
HARDWARE:	Sun/HP Workstation/Server, PC, Mac, SGI Workstations.
LANGUAGES:	Java, Erlang, Groovy, Scala, Clojure, C/C++, Ruby, Perl, Assembler, Python, Tcl/Tk, Shell Script, PHP, SQL, Pascal, Fortran 77, Ada, OCAML, C#, Lua.
METHODOLOGY:	UML, design patterns, object/aspect oriented development, AI and genetic algorithms, distributed computing.
NETWORK:	Ethernet, ATM (LAN/WAN), TCP/IP, voice-over-IP (VoIP), video-on-demand, routers/firewalls.
DATABASES:	Oracle, PostgreSQL, MySQL, Derby.
NOSQL	JCR(Jackrabbit, CRX), CouchDB, Bitcask, Kyoto Cabinet, Riak.
WEB SERVICES:	Tomcat, SOAP, JBoss, J2EE, Ruby on Rails, AJAX, XML, HTML, Javascript, ActiveMQ, Clustering.

## EXPERIENCE

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November 2006 – Present: Senior Software Developer at *IPsoft Inc.* (New York, NY)

- Internal projects as R&D Engineer.
  - Key developer for IPsoft's proprietary ITSM software: IPcenter.
  - Designed and developed a new AS400 system monitoring tool (Java/JTOpen/Groovy/Netty).
    - Used Groovy in order to reload automatically monitoring checks at runtime.
    - Designed the engine to withstand 50 checks per second.
    - Designed a framework to allow anyone writing new checks to focus on the check logic.
    - Designed a framework to allow check developers to remotely access AS/400 systems.
    - Used the Netty framework accepting concurrent requests from an external scheduler.
    - Provided support once live.
  - Designed and developed an event correlation engine (Java/Esper/ActiveMQ/Hibernate).
    - Designed and developed a ticket correlation engine based on rules (Esper).
    - Designed a framework to use CMDB information in the rules.
    - Provided support once live.

- Implemented several “eBonding” system integrations (Java/ActiveMQ/Hibernate).
- Extends IPsoft's current framework to connect with new customers.
  - Used both email and SOAP transports.
  - Customized the service to match customer requirements.
  - Provided support once live.
- Work for Time Inc. (TII).
  - Designed and developed a new Content Management System (CMS) managing magazine websites for Real Simple, Coastal Living, Southern Living, Cooking Light, Southern Accents, and others. TIPS v1.0 (Java/Spring/JCR/Flex/Ajax).
    - Helped to design the core concepts.
    - Designed the JCR tree and node types for the CMA and optimize it for fast retrieval.
    - Designed and developed CMA server (Java/Spring/Jackrabbit/Flex/Tomcat).
      - ability to create contents based on content type.
      - ability to create content types.
      - user administration and authorization.
      - ability to publish one or several contents by computing their dependencies (backing mode).
      - ability to search contents (Lucene).
      - image/asset management.
    - Import/Export Tool (XML).
    - Designed and developed a Flex administration tool.
    - Helped to develop the content edition front-end (Flex/Ajax).
    - Published successfully the magazine website allyou.com.
  - Led the CMA development team to TIPS v3.0 (Java/Spring/JCR/Flex/LCDS).
    - Led a team of 5 Java developers.
    - Refactored the CMA to use LCDS as middle-ware.
    - Improved the search capabilities by linking JCR to LCDS with a customized wrapper.
    - Helped to design a new administration tool using the CMA services (Wicket).
    - Designed a new grid capability to manage itemized content.
    - Helped to migrate from Jackrabbit to CRX.
    - Published successfully the magazine websites:
      - realsimple.com,
      - coastalliving.com, sunset.com, southernliving.com,
      - cookinglight.com, southernaccents.com,
    - Provided support once live.

October 2003 – October 2006: Consultant at NeoMetSys (New York, NY)

- Work for the *European Commission*.
  - Integration of an American Air Traffic Simulator for European environment.
    - Mastered the application involving a multi threaded and distributed platform (Java/JBoss).
    - Provide support in the development team on the business objects and architecture. (Jboss/Derby/J2EE).
    - Made significant structural changes to the application for a demonstration (Java).
    - Integrated the application for Linux and Windows (Shell/Batch).
    - Added a new feature to filter data according to the user role (Java).
    - Adapted the main GUI (displaying current flights) and added new features (Java).
    - Wrote documentation and diagrams describing the internals of the engine.
- Work in partnership with *Metron Aviation Inc* for NASA and FAA.
  - Production of a new Simulation/Analysis tool for NASA.
  - Software wrapper developed between FACET and POET.
    - FACET : air traffic simulator written in Java and C by AMES NASA.
    - POET : air traffic analysis tool written in Visual Basic by MAI.
    - Mastered the two applications and modified the API to implements new features in both parts (Java/C and VB).
  - Extensive use of different database sources (Oracle/MS SQL/Derby).
    - Rewrote the stored procedures from Oracle to Derby Java code.
    - Managed the migration from Oracle to Derby by producing scripts (Perl).
- Work in partnership for South Africa Aviation Administration.
  - Designed modules of the new Flight Data Repository for South Africa Aviation Administration.

- Wrote specifications and UML diagrams for the communication module.
- Internal projects.
  - Adapted the main American airline/airport collaboration tool for European environment.
    - Mastered the application (server and client) used in Command Center (Java/Shell).
    - Extracted the common notions between USA and European flight informations.
    - Designed and developed a converter for both static and dynamic data (Perl).
    - Modified the GUI and core (Java) according to the new environment.
    - Prepared a demonstration for the Maastricht Convention.
  - Led the Linux team and provided support on internal projects.
    - Provided support about Linux to company teams.
    - Prepared a Live CD containing our last products and documentations for marketing purpose (KDE/mklivecd).

January 1999 - October 2003: Consultant at *NeoSYS (Massy, France)*

- Set up and maintained the company network and appliances according to users wishes.
  - Designed, built and maintained the headquarters network with firewall and VPN features to communicate with other locations.
  - Installed and configured different application servers (documentation, news, Intranet, backup).
- Wrote a comparative study of present Web middleware in USA in 2003.
  - Met the principal middleware producers on the East Coast.
- Managed the main simulation tool of the Air Traffic Flow research team at Eurocontrol for 3 years.
  - Mastered the application (written in Ada) without any documentation or references (HP-UX/Shell/Ada/Oracle).
  - Installed, configured, supported and used it to run simulations according to different scenarios and reported the results to the team.
  - Developed scripts and tools to generate scenarios and to manage the main database (Oracle/shell/Perl/TclTk).
  - Designed and developed a simple GUI to visualize sky sectorization (Java).
  - Designed and developed an application to generate sky sectorization from basic geometric elements according to sets of rules.

November 1998 - January 1999: System Administrator at *Optium Ingénierie. (Kremlin Bicetre, France)*

- Tested, configured and integrated new developed modules for Brehat (train cars localization server).
  - Tested, integrated and reported on new developed modules written for the localization server.
  - Server used to survey the main express subway lines at Paris.

May 1998 - November 1998: System Administrator at *Schlumberger. (Montrouge, France)*

- Installed, maintained and supported oil research application suite (Geoframe).
  - Mastered the application server, interfaces and utility tools (Solaris/IRIX/HP-UX/Oracle).
  - Installed and provided support at the customer office about the use of the application or drawing printers (project average size : 60GB).
  - Helped the main administrator to maintain local servers and network (Solaris)

April 1997 - April 1998: Trainee at *Eurocontrol EEC. (Bretigny/Orge, France)*

- Designed, installed and tested a new multimedia platform through an ATM network (voice, video and data) between Paris and Brussels.
  - Design and configured a direct ATM line between Paris and Brussels with local providers (France Telecom/Belgacom).
  - Installed and configured 3 Sun Ultra 5 servers to be part of this ATM network.
  - Tuned the network to be able to exchange voice, video and data simultaneously.
  - Presented a demonstration of the platform with a Voice-on-IP application, a video conference and an air traffic control simulator distributed on both side on the ATM line.
- Developed Intranet applications in Perl (simulation planning and information center).
  - Wrote Perl CGI applications to extend the current company Intranet.
  - Wrote a documentation server able to store, share, and manage permissions on documents of

different types.

## **EDUCATION**

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- 1998 University Paris VI: MA Computer Science/Geoscience.
- 1995 University Paris VII: BA Geochemistry/Geophysics.
- 1993 University Paris VII: ASc Biology.

## **CAPABILITIES**

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- Authorized to work in USA : Green card holder.
- Languages : French, English , German.
- Author of the GNU/Linux Aviation HOWTO since 2005.
- Founder of several open-source projects: Embryo-Systems, Babler.