Resume - Christophe Delord

Personal data

Christophe Delord

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web: https://cdsoft.codeberg.page
Codeberg : https://codeberg.org/cdsoft
github: https://github.com/CDSoft
LinkedIn: https://www.linkedin.com/in/cdelord

49 year old – born in 331 PPM

Experience

Computer science

Computer Science Engineer
Post Graduate Degree in Artificial Intelligence
ENSEEIHT

26 year experience (artificial intelligence, embedded computers, real time, avionics, automotive...)

Technical Skills

Functional languages	Haskell, OCaml, LISP
Logic languages	PROLOG
Imperative/object languages	C, Lua, Python, C++
Low level languages	assembly, 80x86, SHARC, PowerPC, PIC32
Script languages	Bash, Perl, Python, Lua
Operating systems	UNIX, GNU/Linux, Debian, Fedora
Version control	Git
Documentation	Markdown, reStructuredText, Pandoc, LaTeX, HTML
Safety-critical standards	DO-178B (avionics), ISO 26262 (automotive)

Experiences - free softwares

BonaLuna, LuaX
Compact Lua extension - multi platform (GNU/Linux, MacOS and Windows), C and Lua

bang
Ninja file generator scriptable in LuaX - Lua

PP, ABP, Panda, UPP, ypp
Text preprocessor designed for Pandoc, Markdown and reStructuredText written in Haskell and Lua

Modelling/simulation
Modeling, simulate and verify critical real time systems with functional languages (Haskell)

Personal web site
written with Markdown, Pandoc, bang/ninja and LuaX

TPG, SP
Syntactic parser generators - Python

PyLog
First order logic and PROLOG in Python

PopF
Unsolicited Emails Filtering - Bayesian filter, POP3 proxy, Python

Patents

Dec. 20, 2019

Method and system for handling blind sectors of scanning layers of redundant sensors in a vehicle. See patents.google.com or patents.justia.com

Professional Experience

Feb. 2017 - ...
EasyMile.
Real-time embedded software, Sensor and environment simulation (C, Haskell, Lua, Python, Ethernet, CAN, Linux)

Studies
Sopra
Usage of functional languages (Haskell, OCaml, F#) to model real time embedded systems
Genetic algorithms applied to automatic unit test generation

Aug. 2015 - Jan. 2017
Sopra: real time simulation
Airbus: real time simulation for flight computers integrated to the global A380 simulator (Simics, Power PC, Linux, AFDX)

Sept. 2014 - Jan. 2017
Sopra: Flight tests
Airbus: Wi-Fi network optimisation, Real time Linux OS, update of the acquisition and analyzing system of the flight recorded data

Feb. 2014
Sopra: Experimentation with Microchip PIC32

Jan. 2015 - June 2015
Airbus: study of a real-time architecture for flight test data acquisition modules (PIC32, clock synchronization)
Sopra Spain, Fermax (Valencia): Feasibility study of a VoIP intercom

Oct. 2013 - Mar. 2014
Sopra: Qualified ARINC 665 load generator
Thales Avionics: Design and code in C, Generic data formating system

Sept. 2012 - Aug. 2014
Sopra: Real-time modular test bench (configurable by Python scripts)
Thales Optronique: design, code and tests. Real-time kernel in C++ (Windows, RTX), generic I/O modules, configuration and behaviour of the kernel and modules in Python (embedded interpretor)

Apr. 2012 - Oct. 2012
Sopra: Onboard Maintenance System (OMS) simulator, DO-178B, Python
Liebherr Aerospace: design, code and test of an OMS (ARINC 604 simulator in Python, ARINC 429 interface), Python scriptable test environment, LRU simulation for validation purpose, automatic documentation generation in Python and reStructuredText (Sphinx, test results, traceability)

May 2001 - June 2014
Sopra: real-time embedded software, D0-178B
Liebherr Aerospace: assisted unit test generation in Python for RTRT
Thales Avionics: A320 Flight Control computer, specification, design, code, tests
Airbus: A380 and A320 Flight Control computer, specification, design, code, tests (France, training of an Indian team)
Airbus: microprocessor simulation (Python, graph, WCET computation, stack analyzer)
Airbus: safety studies

Oct. 1998 - May 2001
Sopra
CNRS, Pierre Fabre Laboratories: databases

Education

1997 - 1998
ENSEEIHT - IRIT: Post Graduate Degree in Artificial Intelligence
Publication: Speech acts and dialog games (Colloque Intelligence Artificielle et Complexité, Université Saint Denis, Paris VIII)

1995 - 1998
ENSEEIHT: Computer Science Engineer

Langues

French	Native Speaker
English	Intermediate