

Software Engineer

Masters Degree in Computer Science

Personal Information

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Studies

Obtained a **Bachelors and a Masters degree both in Computer Science** a EPITA the most reputated computer science school in France for producing Engineers with a strong knowledge in computer science.

This school is very different from conventional learning that involves 75% of your time in class rooms and maybe 25% actually coding projects. Epita puts you into Software development from day 1 and teaches a maximum through projects (80% projects 20% classes)

School Projects

2003-2006: Three years at **EPITA**, specialization in multimedia and new technologies of information (**Master's Degree in Computer Science**)

Worked on the following projects:

- **J2EE/Hibernate/Flash:** *(5 people)* a Web site developed to organize your life named "OrgaNice" and provided the following functionalities: emails, agenda, contacts, bookmarks, to do list, Web publishing (blog like) and RSS feeds
- **FLASH:** (alone) a Flash game of a bouncing ball on a randomly generated ground made of holes and accelerating or slowing surfaces
- **C#/ADO.Net/ASP.Net:** (5 people) a Web service of an online store and the Web page for online direct representation of the stock and commands. We represented a supplier that exposed his products through his Web services to a market place used by buyers represented by other students
- PHP/JAVA/JSR223/MySql/Hibernate/Flash:

(3 people) a Web site that provided an agenda, bookmarks and contact management. The goal was to use JSR223 which makes the link between PHP and JAVA

- JAVA: (alone) book library management program that took three XML files in arguments: book list, members list, actions list and modifying member list and book list XML files in consequence (using DIGESTER parsing), (4 people) remake of Zelda entirely in JAVA with XML maps and a map generator, (2 people) an XML universal parser than generates classes for a given XML and loads it in a jTree using the generated classes
- **Zope/Plone** : *(alone)* a Web site of employee vacation management with a work flow of multiple signatures and validations

- **J2ME**: *(alone)* an animation program to learn how to use J2ME with a splash screen, a menu and interaction of keys
- **C** : *(alone)* remake of evalexpr, match, getln, malloc functions, find, an iso reader, a dynamic library (".so" files) reader with command prompt, a tron game using termcap display, *(2 people)* a Reverse Polish Notation Calculator of any base (binary, decimal, hexadecimal, ...)
- **C++** : (5 people) Tiger compiler for UNIX using Lex and Bison parsing, (alone) an LZW compressor, (2 people) a Chess game with termcap display
- **Sparc/Solaris Asm**: *(alone)* a Hello World, a line count and a program that shows the content of a file in hexadecimal
- **Tiger**: *(alone)* a program that compresses data with Huffman's algorithm
- **Member of the editorial commission** of the JDMI Journal (<u>www.jdmi.fr</u>) written by EPITA MMA-NTIC students
- Member of EPITA's marketing and communications team

2000-2003: Three years at EPITECH. (Bachelors Degree in Computer Science)

Worked on the following projects:

- C: (4 people) C debugger for Unix (with breakpoints), remake of netBSD commands: ktrace, kdump, fstat, (alone) Remake of an UNIX Shell as bash and of the snake game (Xlib), (4 people) Development of an artificial life network game (gtk), (2 people) a gtk widget that shows text as an LCD screen and of an FTP server, (alone) remake of the libstream (fopen, fread, fwrite, etc...), of the printf function, (4 people) a ray tracer (to draw 3D object with reflects, transparency, shadows, etc...)
- C++: (alone) remake of a Mine Sweeper (Windows MFC), an heat diffusion simulator (Windows MFC), (4 people) a Taquin game (Windows MFC, A* algorithm and Manhattan distance heuristique), (3 people) a Gomoku game with artificial intelligence of different difficulty playable over the network (followed by a tournament of all the artificial intelligences of that year's class I finished 7th over 300)
- **OpenGL**: (2 people) a 3D representation of a simple file containing coordinates of a land with texture mapping and falling rain that make the rivers grow. I also made a MFC/C++ program that generates maps for it
- UNIX Shell Script: (alone) Shell script emulating the functioning of a data base
- **Perl**: (alone) test programs (to verify C projects)
- **Assembler**: (alone) Conception and programming of a Lego robot in assembler 6800 Motorola for a competition with all EPITECH students (finished 1st)
- PHP/MySql: (4 people) Auction Web site like eBay
- Oracle forms training
- Team work management (Project leader on many projects)
- Production of a 1 min. movie (filming, acting, directing, producing and mixing)

Internships

Google

C++ / Java / J2EE / Python / Perforce / RPC - Jan. - June 2006 - Mountain View, CA

"Francois takes initiative to push for results. He's very willing to learn new technologies and proficient with linux desktop, editor and build environements" *Eric Van Der Poel (manager)*

Worked on the Internationalization team. (Using C++ and Python)

- Compared speed of a number of character encoding converters
- Computed distribution of Unicode scripts on the Web using three different HTML parser APIs
- Modified an existing project that is some kind of a mini version of Google's Web search engine so that the I18N team can use it to test modification of the indexer without risking to crash the real search engine
- Made a presentation to the team about the new mini version of the Web search engine so that they knew how to test their functionalities

Worked on the Google Video team for my 20% project. (Using J2EE, JavaScript, Bigtables, and RPC protocols)

• Developed a new interface for Google video

SoWeDoo

Php / MySql / Mambo - May - Dec. 2005 - Mongeron, France

Maintained the <u>sos-pdf</u> Web site and Internet sales management of SoWeDoo products (software)

- Web master of <u>www.sos-pdf.com</u> for it's new version
- Feeding of articles for sos-pdf
- Referencing of SoWeDoo products at Telecharger.com, Download.com, etc...
- Creation of PAD files for each product
- Job done in cooperation with another EPITA student

<u>Medasys</u>

C++ / MFC Windows - Oct. - Dec. 2004 - Gif sur Yvette, France

Developed a manual human cell counter, part of the Biolink Software, as well as its configuration tool for Medasys, computer solution integrator for medical purposes

- Was fully responsible for this part of the project
- Had discussions with every Business unit of Medasys (R&D Director, Marketing members and on-site installers)
- Adaptation to an existing API (results of passed automatics analysis, link with the other functionalities of Biolink)
- Evaluation of needs (briefings with R&D, commercials, installers and the Client)
- Studies on how the needs could be best served
- After development support
- Writing of the API documentation for further developers
- Additional development (some script development help and testing program)

 The project is complete and sold as a part of the Biolink solution (learn more at <u>http://dermu.free.fr/Medasys)</u>

<u>Keyrus</u>

HTML / JavaScript / SQL - Aug. - Nov. 2001 - Paris, France

Was the Web master for the subscription Web site of the "Employment Train" event

- Installation of a RedHat server
- Installation of Apache and MySql on the server
- Definition and creation of the databases
- Development HTML/JavaScript
- The project was sold

<u>Intesys</u>

Visual Basic - May - Sept. 2003 - Paris, France

Developed the TaskTimer Database Wizard Software (multiple data base synchronization software between TaskTimer and Outlook, or simple text file)

- Managed a team of three people
- Had contact with the client to improve the functionalities of the project
- Adaptation to an existing API
- Learning of how Outlook stores its contact list, events, etc...
- The project is currently sold with a package of add-ons for TaskTimer

Find my resume and learn much more at: dermu.free.fr