Frédéric Dubouchet

frederic.dubouchet@gmail.com | +41 (79) 104 85 76

RESUME OBJECTIVE

Developer for 20 years in a multiples companies including some of the biggest in the industry (**CERN**, **Google**), I hope I can bring some of my knownledge in embedded and big data system to my future employer. Having contacts in the industry in both the French and the German part of Switzerland, I can be a valuable addition in any company to achieve their goal.

EDUCATION

HES-SO // MASTER
MSE in Information and Communication Technologies
2011 - 2013 | Lausanne, CH
Thesis : (6 / 6) - Betatron tune measurement with the LHC damper using a GPU

HES-SO // HEPIA
BS in Computer Science
2002 - 2005 | Geneva, CH
Thesis : (5.5 / 6) - 3D stereoscopy

EPFL
Computer Science
1997 - 1999 | Lausanne, CH
Unfinished - Founded of a company

MATURITÉ
Type S, scientifique
1997 | Geneva, CH
Grad. (74 / 90) - Swiss secondary school degree

LINKS

Github:// **anirul**
LinkedIn:// **Frédéric Dubouchet**

COURSEWORK

GRADUATE
Artificial Intelligence + Practicum
Cryptography
Software Security
Optimizations
Fourrier and Wavelets
Web Data Mining
GPU computing
Cloud computing

UNDERGRADUATE
Digital Signal Processing
Compilers + Practicum
Theory of Computation
Operating Systems
Databases
Virtual Marchine + Practicum
Computer Graphics + Practicum

EXPERIENCE

ORIGINAL SCORE | Founder, CEO
March 2019 - Now | Lens, CH
Realization of a game to be release on Steam
- Organizing with Editors and financial sector
- Managing a team of graphists and game designers

GOOGLE | Software Engineer
October 2015 - February 2019 | Zurich, CH
Working on Google Shopping from anti-spam to database
- Database writing for the Google Shopping group (C++/OpenCV)
- Reviewing process for online automatic purchase (C++/Javascript/Java)
- Version checking system from online automatic purchase (C++)

IDIAP RESEARCH INSTITUT | Software Engineer
August 2014 - August 2015 | Martigny, CH
Developer for research projects
- Teaching computer vision to researchers (C++/OpenCL/OpenCV)
- Robotic and computer vision projects (C++/OpenCL/CUDA/OpenCV)
- ASR Automatic Speech Recognition (python)

EPFL - MOKASTUDIO | Senior Software Engineer
February 2014 - July 2014 | Lausanne, CH
CTI project for a 3D animation and inverse kinematic application
- Writing a full forward scene graph (C++)

CERN | Software Engineer
May 2006 - December 2013 | Geneva, CH
Software and drivers for controling custom harware board in a realtime environment, on LynxOS and then Linux
- Leader for the Linac4 RF control system (C++)
- LHC RF Beam control: architecture, coordination, implementation (C++)
- ADT damper: architecture, coordination, implementation (C++/OpenCL)
- LHC conditionning for the cavities, implementation (C++/Labview)

NAGRAVISION - KUDELSKI | Software Developer
2001 - 2002 | Lausanne, CH
Content management and encryptions for digital television
- Porting the software from Win32 to Linux and TRU64 UNIX (C/C++)

LYSIS SA | Software Developer
2000 - 2001 | Lausanne, CH
Content management and encryptions for digital television
- Multiplexer driver for digital trelevision (C)

ELEAF SARL | Founder, Software Developer
2000 - 2001 | Geneva, CH
Web deveolopement moslty backend
- COM objects for Web/ASP FTP, POP3, IMAP interfaces (C++)
- Multimedia Java Applets (Java)

RESEARCH

CERN | Graduate Research
July 2013 - December 2013 | Geneva, CH
Betatron tune measurement with the LHC damper using a GPU with **Prof. Paul Albuquerque** and **Dr. Wolfgang Höfle** during my master thesis. A system to make realtime fourrier transform on GPU to be able to better react to instabilities in the LHC beam using the ADT damper. It was presented at the **IBIC 2013** conference in Oxford, UK.

HEPIA | Undergraduate Research
Jan 2013 - Apr 2013 | Geneva, CH
A simple study of OpenCL and comparaison with CUDA made for the Hepia. Implemetation of various algorithms using OpenCL, available on **github**.

TEACHING

EPAC | École Professionnelle des Arts Contemporains
September 2019 - July 2020 | 40% | Saxon, CH

- Game Engine technologies (C++/OpenGL/gRPC/Socket/...)
- Handling of Unreal 4 (C++/Blueprint)

SAE | Creative Media Education
February 2019 - Now | once per month | Geneva, CH

- Game Engine technologies (C++/Socket/...)
- Handling of Unreal 4 (C++/Blueprint)

SGA | Swiss Game Academy
August 2016 | July 2019 | Fribourg, CH

- Handling of Unreal 4 (Blueprint)

SKILLS

LANGUAGE | Natural

French	Mother tongue
English	Fluent
German	Rusted
Japanese	Beginner

PROGRAMMING | Languages & OS

Over 100'000 lines	C++ • C
Over 10'000 lines	JavaScript • protobuf • Java • Python
Over 1'000 lines	• LaTeX • XML/XSD • Assembly • gRPC • LUA
Familiar	git • make • cmake • PostgreSQL • sqlite • Blueprint
OS	iOS • Windows • OSX • Linux • FreeBSD

AWARDS AND PROJECTS

2001	Ping	32k game	C++	6th at Mekka and Symposium
2002	El Loco Megabus	32k game	C++	1st at Mekka and Symposium
2005	panoptriptikum	intro 4k	8Bit-Script	2nd at Breakpoint
2006	Biolite	96k game	C++	6th at Breakpoint
2009	miniDHT	network	C++,protobuf	Distributed Hash Table (P2P)
2010	Biolite Reloaded	game	C++	1st at Buenzli
2012	MOLA Parser	research	C++	Parsing of NASA Mars Orbital Laser Altimetry
2014	See Mark	game	C++	Epic Game Jam
2015	CPPS UE4	research	Blueprint	Multiscreen setup for use in an earthquake simulator
2015	Mirages	game	Blueprint	Global Game Jam
2015	Meow Zedong,...	game	Blueprint	Epic Game Jam
2016	Green Revenge	game	Blueprint	Epic Game Jam
2017	Maneki Neko,...	game	Blueprint	Epic Game Jam
2018	Isotops	game	C++,Blueprint	Nordic Game Jam
2018	Meow Zedong 2,...	game	C++,Blueprint	Epic Game Jam
2019	Mini Epic City Builder	game	C++	Epic Game Jam