

# Jonathan Muller

VICE PRESIDENT OF ENGINEERING

📧 | ✉️ | 🏠 jonathan.pukogames.com | 📱 pukoren | 📧 jonathan-muller | 📺 jonathanmuller0

## Experience

### Dial Once

Paris, France

VICE PRESIDENT OF ENGINEERING

Oct. 2014, Today

- Engineering team management and planning
- Ship on time features with highest technical quality
- Ensure our uptime, latency and worldwide availability requirements
- Define coding guidelines and development workflows, ensure code quality
- Deploy a scalable and modular production environment, using a coherent Microservice architecture

### Chronoresto

Saint-Ouen, France

FULL STACK ENGINEER

Jun. 2013 - Sep. 2013

- Tech lead on new partnership development with Yelp
- Maintain and improve the current website made with ASP.NET MVC and Orchard
- Add new features to our order management system where orders are sent live, ASP.NET MVC

### Sien (Adaptive Bee)

Paris, France

SOFTWARE ENGINEER

Jul. 2012 - May. 2013

- Steam-like software development based on Chromium
- R&D on a desktop Launcher for Windows 7, using C++
- R&D on a messaging system inside chrome extensions using websocket protocols
- New browser POC based on a Chromium fork (now UR browser)

### Asset Technology

La Defense, France

SI MANAGER

Jul. 2011 - Jun. 2012

- ERP development (VB6 to C#.NET migration)
- Computer fleet management (orders, maintenance, inventory) and technical support
- Design, plan and develop and remote update software for the computer fleet

### Mediapiazza (Digital Virgo)

Paris, France

WEB DEVELOPER

Jul. 2009 - Dec. 2010

- CMS development (fullstack) for mobile phones with low display capacities
- Development of B2B projects

## Technologies

### Languages and frameworks (currently skilled with)

JavaScript, PHP, C/C++, Java (Android), Docker | Node.js, CodeIgniter

### Architecture and conception skills

Microservices, Image analysis, A.I, Generic/Predictive Algorithms

### Cloud

AWS (S3, Beanstalk, EC2), Azure (Virtual Machines), Docker Cloud

### Databases and Brokers

MongoDB, MySQL, Redis, RabbitMQ

### Code quality and collaboration tools

Sonarqube, CircleCI, Codeship, Git & GitHub, irc, Slack

### Not mastered (or forgotten skills)

Python, C#, Swift, OpenGL, Unity3D, Blender, SQL Server, Oracle

## Education

### ESGI(École Supérieure de Génie Informatique)

Paris, France

MASTER 3D AND VIDEO GAME ENGINEERING

2009 - 2011

- Learning algorithms (genetic mutation) development
- Research and publication on loading times optimisations on slow mediums
- Serious game development about animal ill-treatments and the meat industry

### ESGI(École Supérieure de Génie Informatique)

Paris, France

BACHELOR ENGINEERING OF CS AND INFORMATION TECHNOLOGIES

2011 - 2012

- Real-time game development on mobile platform with high technical challenges (PSP handheld, Dreamcast)
- Multiplatform development and C++ memory management research

### ITIN(Institut des Techniques Informatiques Nixdorf)

Cergy, France

LICENSE ENGINEERING MANAGER APPLIED TO CS

2009 - 2011

Project management, agile methods (PUMA, SCRUM)

- Conception and development techniques
- Network layers research and packet analysis

## Extracurricular Activity

---

### Pukogames (Independant Open Source video game development group)

France

ACTIVE MEMBER AND FOUNDER

Sep. 2010 - Today

- R&D on new web technologies and 3D tools
- Prototypes development over a wide range of devices (PSP, Dreamcast, Linux, Windows, Xbox360)
- A real passion for performances and cross-platform software

### XK-Project (Non-official charity organization)

International

CO-FOUNDER

2006 - 2010

- Offered game servers, events and communication tools for free and without limitation for more than 2000 players

## Projects

---

### Liquid Impulse

Paris

CONCEPTION AND DEVELOPMENT

Mar. 2014

- R&D on cross-compilation Unix > PSP
- Optimisation of memory consumption using C++ extensively

### KFC (Kute Frightened Chicken) - Serious Game

Paris

CONCEPTION AND DEVELOPMENT (POC)

2014

- Research on serious game mechanism, and the impacts on the player

### Speedrun

Paris

CONCEPTION AND DEVELOPMENT

2013 - new version coming on Github

- R&D on cryptography techniques and data integrity checks
- Differential computation system to ensure a similar game experience on various devices
- Physics engine integration and wiring with the 3D engine

### Exploot

Paris

CONCEPTION AND DEVELOPMENT

2013

- R&D on UDP communication and transfert optimisation / tradeoff
- Research on prediction algorithm and temporal computation to compensate network latencies between players

### Speedball

Paris

CONCEPTION AND DEVELOPMENT

2012

- R&D on indirect-control game mechanism

## Publications

---

### Game loading optimization techniques in Open World games

Paris

AUTEUR

Mar. 2014

- State of the art presentation for loading techniques on low performances mediums (optical disks mostly)
- Research on mechanism to reduce loading times
- Comparative charts and reports on compression formats, and storage allocation for medium space optimisation and read speed

## GitHub

---

### Open Source projects

GitHub

Apr. 2013 - Today

- /PuKoren/exploot-server: Networking and client/server architecture using C++
- /PuKoren/liquid-impulse: cross-platform game, with high performances challenges (PSP)
- /PuKoren/speedrun: a game engine architecture, with Physics world bindings to update game objects
- /PuKoren/.config: because you can learn a lot about me by reading my config