

**Florent FORTAT** (he/him)  
36 y.o.

<https://florent.fortat.fr/>

Paris area – Chartres

+33.6.84.53.28.70  
florent@fortat.fr

## Web and Game Developer

### Work Experience

July 2024 Sept. 2024 3 months	<b>PixiJS Developer</b>	<b>Tralalere – Freelance</b>
	Developing an educational game engine functionally identical to an existing product from the client, with modern technologies. Add support for Python in the engine. Contract fulfilled in partnership with another contractor on a short timing.	
Sept. 2023 Nov. 2024 1 year 3 months	<b>Angular Developer – Maintenance</b>	<b>Tralalere – Freelance</b>
	Contract for 2 days of dev work per month to maintain an application with bugfixing and improvements. Regular technical design in tandem with backend devs.	
May 2023 Nov. 2023 7 months	<b>Angular Developer</b>	<b>Tralalere – Freelance</b>
	Developing new features and maintaining the main client's application in Angular 16 with a Drupal backend in a team of 8. Technical design proposals discussed with the team before implementation.	
Since August 2022 2 years 8 months	<b>Developer &amp; Founder</b>	<b>TDB Creation</b>
	Founded a solo game studio to work on my own projects and offer game and web development services.	
	Livestreaming game and web development on <a href="#">Twitch</a> .	
	Game Development:	
	<ul style="list-style-type: none"><li>• Idle Circles: idler game with a neon style and a synthwave vibe. Currently in development with a <a href="#">demo available on Steam</a>.</li><li>• Cozy Puzzles: mobile game, match 3 with a cozy atmosphere that favours relaxation. Currently in development and testing phase on Android</li></ul>	
	Development services:	
	<ul style="list-style-type: none"><li>• Gamedev with Unity or Javascript/Typescript</li><li>• Web applications and sites (Angular, React)</li><li>• Backend (NextJS, node.js)</li><li>• Audits on code bases and processes</li></ul>	
May 2020 June 2022 2 years	<b>Lead Unity Developer</b>	<b>Gamabilis</b>
	Managing a team of up to 5 developers, including occasional contractors, in a growing startup with weekly 1:1 to ensure their well-being. Participating in the company's management. Designing the technical architecture of the company's projects. Developing processes and guidelines in consultation with the developer team. Animating and supporting workshops and share of tech monitoring for the developer team. Training the developer team in code reviews, unit tests, integration tests and CI/CD. Installation and maintenance of tools for the development pipeline on AWS (Gitlab, Jenkins with agent builders, Jira integration)	

**Tricky Life:** Technical architecture, support on base systems development for this mobile game.  
*Tools: Unity, Firebase, Play Store, App Store*

**Roots of Tomorrow:** Technical architecture, prototyping, support on gameplay and systems development, support on project management, development on some features, back office development (front-end & back-end), referring developer.  
*Tools: Unity, Angular, Express, MongoDB, Firebase, Steam, Play Store, App Store*

**Challenger Deep:** Technical architecture for a common framework that will be used in multiple projects, support on systems development for the web and mobile game, back office development (frontend & backend).  
*Tools: Unity, Angular, Express, MongoDB*

**Purple Town:** Technical architecture, prototyping, base systems development for this mobile game, contractor management for a substantial part of the first version, referring developer.  
*Tools: Unity, Play Store, App Store*

Maintenance on legacy projects to update them for mobile stores.

Since 2018  
7 years

## Teaching

TSP / ENSIIE

Near Field Communication (NFC) at *Telecom SudParis (since 2018)*  
One full day of class and practical per year within the *Short range communication and embedded programming* module to teach and practice with NFC standards using NFC tags and microcontrollers.

Game Development at ENSIIE (since 2024)  
84 hours of classes and practical spread over 2 modules in a year for engineering students. Teaching base principles of how a game engine works. Applying this knowledge by using Unity during practical work. In-depth study of advanced Unity packages.

Supervising at *Telecom SudParis / ENSIIE (since 2014)*  
Volunteering to help supervising a yearly academic gamejam to help and guide students during the event.  
Ad hoc supervising for end of studies projects for the joint video game curriculum between the two engineering schools.

Nov. 2018  
Apr. 2020  
1.5 years

## Lead Front-end Web Developer

Tralalere

Co-management of a 6 to 8 developers team working on an Angular 6+ modular and generic application, developed as a white-label product and instantiated for multiple clients and projects.

Point of contact for this white-label platform. Responsible for the right level of generic developments made for the application. Monitoring, design assistance and technical assistance to the team members. Management of contractors taking part in the application's development.

Recruiting new team members with technical, organizational and soft skills complementing the team's own. Distributing tasks across the team working in tandem with the Scrum Master. Technical point of contact for the other teams in the company to prepare answers to requests for proposal or to advise for strategic decisions for the company. Managing time for sharing technical monitoring among developers.

Nov. 2017  
Oct. 2018  
1 year

## Front-end Web Developer

Tralalere

Developed web applications using AngularJS, Angular 2+ and Javascript. Back-end environment Drupal accessed by a REST API.

In a team composed of 6 to 8 developers, designed and developed of an Angular 6+ modular and generic application as the front-end of an LMS. Linked to Drupal 7

back-end using a REST API. Designed and developed proprietary package manager to handle modules developed for this application. In charge of design and development of several modules of the platform (dashboard, project management, etc.). Setup and maintenance of the front-end deployment pipeline.

Picked up, bugfixed and developed new features on JavaScript applications based on a third party proprietary library. Bugfixes on a Drupal front-end, updated several API endpoints. Developed an Angular 5 application to generate and manage content in a generic manner, instantiated for Code-Décode – <https://www.code-decode.net/>

Developed an HTML parser to insert tags for highlighting text and to use a third party syllabic coloration library targeted for dyslexic readers. Developed several features for AngularJS and Angular 2 – <https://linum.education/> – <https://www.tralalere.com/>

Involved in workflow improvements for the developer team, including with Git. Documentation for technical and non-technical people.

Nov. 2013  
Oct. 2017  
4 years

## R&D Engineer

Hanakai – Prodigy

Designed and setup of development guidelines and build pipeline for an Unreal Engine 4 project. Designed and developed the update process for the game. Development in a team of 2 of a game launcher in C# with WPF, including the auto-update system and the incremental game update system.

Designed in consultation with team of the git workflow. Expressed constraints and needs to non-technical people. Documented all the processes.

Reached an expert-level knowledge in the NFC technology. Monitored the design of the games NFC device by a contractor. Designed and implemented the proprietary communication protocol used with the device in a UE4 plugin and as a node.js module. Integrated the plugin's features into the game in order to control the game with the custom USB device. Developed testing application for our manufacturing partners and tools to support internal development.

Developed several features in UnrealScript for UDK in an existing code base to add features from a USB device using a DLL maintained in C++.

Prototyped an NFC-based mobile 2D game. Developed a technical prototype on PS4 with Unity using an NFC USB device.

Produced and participated to monthly livestreams and other public events.

Apr 2014  
Sept. 2016  
2.5 years

## NFC Security PhD Thesis

Hanakai / TSP

Research and design of light and secure solutions for NFC objects and suitable for a video game environment.

Designed a system model to be applied to video games using NFC technology. Security analysis applied to this model to identify existing security flaws. Identified and recommended security measures applied to the model. Paper: [Games based on active NFC objects : model and security requirements](#)

Designed a security solution using end-to-end encrypted communication between and active NFC device and a remote server following the aforementioned recommendations.

Proposed and managed a student project to develop an NFC video game using active objects allowing for physical interactions outside of the video game.

March – Oct.  
2013  
8 months

## Research Engineer (Internship)

LRI / Network Team

Researched and designed a distributed algorithm to select the best access point in a Wi-Fi mesh network. The main goal is to spread evenly all the users in space over all the access points of the network to optimize the global signal quality.

Developed simulation and access point selector tools to prove the efficacy of the algorithm in competition with an optimal centralized solution.

Developed a mobile evacuation application using a variant of the distributed algorithm previously designed during my internship. Demonstrated the efficiency of this solution against a centralized algorithm.

## Skills

<b>Languages</b>	C#, Typescript, Javascript, PHP, C++, Python, C, Java, bash, Lua
<b>Engines</b>	Unity, PixiJS, Unreal Engine 4, Pixi.js, UDK
<b>Frameworks</b>	Angular, NestJS, React, Express, Jquery, Wordpress
<b>VCS</b>	Git, Mercurial, SVN, Alienbrain
<b>DBMS</b>	MongoDB, MySQL/MariaDB, Oracle
<b>Communication</b>	NFC, USB
<b>Security</b>	Encryption and signature, secured network architectures, EBIOS
<b>Administration</b>	Jenkins, Giltab, Apache, Postfix, Squid, netfilter, Nagios, Samba, Radius, CARP, OpenLdap, Active directory, Bind, keepalived, Packet filter, OCS
<b>Virtualization</b>	Docker, VMWare ESXi, Xen, KVM
<b>Network</b>	TCP/IP, DNS, DHCP, Routage, SNMP, VPN, VLAN, LLCP, SNEP
<b>Environments</b>	GNU/Linux, BSD, Windows, macOS, AWS

## Education

2021-2022	<u>SpineUp</u> – Management training, 6 days spread over 3 months	Paris, France
2011-2013	MSc Systems and Network Architecture – with high honors	Evry, France
2008-2011	BSc Computer Science – with honors	Evry, France
2006	Baccalaureate in Science specialized in Engineering – with honors	Bourges, France

## Languages

<b>French</b>	native language
<b>English</b>	fluent
<b>Espagnol</b>	basics

