
Education

2011 – September 2016 - Master of Computer Science specialized in Human Computer Interaction
(Toulouse, Paul Sabatier)

5th year project: Prototyping the future of video consumption (4 team members, 100h, Unity C#)

- Conducted a complete UX design cycle, from research and brainstorming to prototyping and user tests.
- Designed and prototyped a new way to search movies and to watch interactive videos.
- Created a user interface with parallax scrolling and animated transitions, supporting several types of remote controls.

4th year project: Fly Higher, an educational video-game for young children (4 team members, 100h, Unity C#)

- Created two mini-games, the UI, the structure of the game, the saving and translation modules.
- Researched educational entertainment and wrote a small paper about it.
- Organized and conducted play tests with primary school children.

Experience

UX Design Intern at CityMeo (March 2016 – September 2016)

Project: Analyzing and improving the usability of a web application (HTML, CSS, JavaScript, Django, Python)

- Designed, wireframed and participated to the implementation of new functionalities on a web application.
- Reported usability problems and bugs on the application and corrected some of them directly.
- Conducted interviews with users to get feedback on the application and created user personas.

Software development intern in the IRIT ICS Team (May 2015 – August 2015)

Project: Development of a tablet application platform in an environment of helicopter cockpits (Java, Petri nets/ICO)

- Created a Java API to allow several Petri net based applications to communicate in TCP.
- Created a small user manual and multiple diagrams to document my application.

Personal projects with Unity

SlideBall (September 2016 – in progress) – 300h

A multiplayer sports game on WebGL

- Implemented a networking architecture based on peer to peer and WebRTC.
- Experimented with client side prediction, interpolation and extrapolation to synchronize entities.
- Conducting playtests sessions to find and correct bugs.

Perspective Shift (April 2016 – August 2016) – 100h

A puzzle game shifting between 2 and 3 dimensions

- Implemented level management, movement animations, shifting between 2D and 3D, undo with animations.
- Created a tool to build, edit and test levels for the game.

Gesture recognition (June 2016 – July 2016) – 50h

Saving and recognizing gestures with a leap motion

- Retrieved and serialized data coming from the Leap motion controller.
- Researched and tried several machine learning algorithms for gesture recognition (HMM, HCRF, DTW).

Other

Hobbies: Theatrical improvisation, Video Games

Languages: French native, English highly proficient, Spanish basic

You can play or see the code of my projects on my portfolio website:

lesphax.github.io/