Pau Nonell Isach

Address: C/Banys, 77, 3º 3ª, 08530 La Garriga (Barcelona)
Date of birth: 13/07/1996
Mobile: +34 620321200 / Email: pau.nonell@gmail.com

EDUCATION

09/15 - 06/20 **Degree in Multimedia Engineering**
La Salle – Universidad Ramon Llull, Barcelona (GPA: 3.47/4.0)
Complete portfolio at: http://pnonell.github.io

09/19 - 01/20 **Exchange program of the degree in Multimedia Engineering**
National Chengchi University (NCCU), Taipei, Taiwan

09/14 - 06/15 **First course of the degree in Architecture**
La Salle – Universidad Ramon Llull, Barcelona

09/12 - 06/14 **Technological High School**
Graduated with honors (#1 of class). *IES Vil·la Romana, La Garriga*

WORKING EXPERIENCE

06/17 - 05/18 **INVERPRIBAN.** *Barcelona*
Fintech specialized in investments and loans with 15 employees

Front-end Intern Technology department**,** reporting to the CTO

Functions:

- Programming all the Front-End of a platform called FiValue, whose objective was to automate the functions performed by the company Inverpriban
- FiValue Platform Back-End Assistance
- Design of the FiValue platform together with the marketing team
- Programming the Front-End of the company's Intranet

Projects:

- Construction in its entirety of the FiValue platform, whose functionalities include the management of investments and loans, calculation of loan quotas and capital movements

LANGUAGES

Spanish (Native), Catalan (Native), English (Fluent; Advanced Certificate -C1-), Chinese (Intermediate; HSK II -A2-)

COMPUTER AND TECHNICAL SKILLS

Computing:

- Basic: Office Package (Advanced)
- Programming languages: HTML (Advanced), Javascript (Advanced), CSS (Advanced), PHP (Advanced), Python (Advanced), Java (Medium), SQL (Medium), C (Medium), C++ (User)
- Databases: PostgreSQL (Medium), MySQL (Medium)
- Digital Processing: Matlab (Advanced)
- Web development: Axure (Medium), Adobe Experience (User)

Audiovisuals

- Modeling and animation: AutoCad (Medium), 3Ds MAX (Medium), Google SketchUp (User)
- Photo and Graphic Editing: Adobe Photoshop (Medium), Adobe Illustrator (Medium), Lightroom (User)
- Video editing: Adobe Premiere (Advanced), Adobe After Effects (Advanced), Windows Movie Maker (Medium), iMovie (Medium)
- Sound editing: Audacity (Medium)

OTHERS

- Driver's license, own vehicle and availability to travel
- Volunteer program in Laos (02/20 - 03/20): web support at local eco-tourism agency

Pau Nonell Isach

MOST RELEVANT PRACTICES CARRIED OUT AT THE UNIVERSITY

1. PRESSURE ULCER DETECTION (University research collaboration – 4th grade)

- This practice is part of a research project of La Salle - Universitat Ramon Llull.
- This project intends to investigate different methods of computer vision and to develop software to be able to segment, in an image of a pressure ulcer, the part of the wound and the part of healthy skin. The aim of this project is to provide tools in the field of medicine to improve and assist in the diagnosis and treatment of this type of wound. The main techniques to achieve the segmentation are the use of Kmeans and Region Growing.
- This project allowed me to try out different computer vision techniques and see how they best fit in one context or another. It also allowed me to further develop the use of Matlab as a tool for digital image processing and gave me the opportunity to work in a university research team.

2. 3D FACIAL LANDMARKS (University research collaboration – 4th grade)

- This practice is part of a research project of La Salle - Universitat Ramon Llull.
- This project is based on the practical use of a depth camera, specifically the Intel Realsense D435 camera. Using this camera and computer vision techniques, the aim is to obtain a 3D representation of certain landmarks of a subject's face. The software developed in this project is intended to serve as a tool for obtaining data for other research medical projects.
- This project allowed me to use computer vision techniques in a Python environment and to use libraries such as Dlib for the landmark recognition. It also gave me the opportunity to work in a university research team and use new technologies such as the Intel Realsense depth camera.

3. DROP (Advanced Multimedia production – 4th grade)

- This practice consisted of designing and prototyping an electronic product that could be marketed.
- The development of this was carried out with a team of 5 people with assigned roles. My specific role was that of hardware manager, so I had the function of choosing, designing and building the electronic components of the product. The final product consisted of a device with slots that detect the presence of mobile phones to encourage the disconnection of these by the users through gamification. This final product was controlled by a RaspberryPi and Arduinos and incorporated the use of an app designed by the group itself to help manage gamification.
- This project allowed us to put into practice technical knowledge learned during the engineering degree, as well as to encourage self-learning by having to face new challenges during the development of the product.

4. TRONER (Object-oriented programming and design – 2nd grade)

- This practice consisted in programming the Tron game using Java as the programming language.
- The final project was composed by a Server software, which administrates the games and the users; and a Client software which is used by the user to play 2,3 or 4 multiplayer games with different game modes.
- This project allowed me to put in practice a Server-Client software and decide how to structure the functions of it. It also helped me to understand the Model-View-controller pattern.

5. PWBOX (Web projects II – 3rd grade)

- This project consisted in programming a cloud storage website (as Drive or Dropbox) with a group of 3 people using web programming languages and Slim Framework.
- Among the functionalities of this website were the registration and login of users, the management of documents and folders and the possibility of sharing these documents with other users.
- This allowed us to put into practice knowledge of both the Back-End for the most part and the Front-End for the least part.