JIAHUI CHEN

Senior Computer Engineering Student

Personal Portfolio



EXPERIENCE

Research Assistant @ Technology Enhanced learning Research Group

La Salle URL - GRETEL research group

September 2021 - Ongoing

</> VueJS / ElectronJS

- Developed jsMLA, a software that analyses students' generated Moodle logs and performs sentiment analysis from forums' chats.
 Starting from Jan 2022, the software will be used in different Spanish Universities and schools (La Salle URL, UPC, URV).
- Designed and engineered both front-end and back-end of the app.
- Applied Agile Scrum methodology for team building and management.

Systems Administration & Design TA

La Salle URL - Teacher Assistant

June 2021 - Ongoing

</> C / Linux

 In charge of designing and developing the projects for Systems Administration, labs correction and office hour.
 Built a Linux Kernel Module (LKM) for a custom circuit board that interacts with a Raspberry Pi's GPIOs. The second project is a web server that controls the Pi with shell scripts.

Data Structures & Algorithms TA

La Salle URL - Teacher Assistant

September 2021 - Ongoing

</> Algorithms

- Designed and marked DSA course assignments. Also, solved students' inquiries for both national and international students.
 - Recursive Sorting Algorithms
 - Combinatorial Optimisation (Backtracking, Branch and Bound)
 - Trees & Graphs & Maps

Advanced Operating Systems TA

La Salle URL - Teacher Assistant

</> C / File Systems

 Marked "File System Reader" software assignment and solve students' inquiries.

Web Development TA

La Salle URL - Teacher Assistant

September 2021 - Ongoing

</> JS / NodeJS / VueJS

- Solved students' questions about JS, NodeJS and VueJS.
- Designed UI & UX for the web assignment.

Build@Mercari

Mercari (株式会社メルカリ) - Apprenticeship

May 2021 - May 2021

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> Software skills

- Improve software engineering skills through the training.
- Build a full-stack project もくもく (moku-moku lovers)
- Mercari's Engineering culture & DI philosophy

EDUCATION

Computer Engineering La Salle URL

m Sept 2017 - June 2022

Scientific & Technologic High School La Salle Bonanova

Sept 2015 - May 2017

VALUES & STRENGTHS

Challenger Eye for detail

Responsible

C Java SQL System design

gRPC VueJS ReactJS

Micro-services

LANGUAGES

English

Spanish

Catalan

Cantonese Chinese (Spoken)

INTERESTS



Japanese

Interested in Japanese culture



Programming

do{Programming}while(alive)



Gaming

Ocasional Gamer

RESEARCH EXPERIENCE

Moodle Learning Analytics - MLA

Research Group Project - Github Repository

Sept 2021 - Ongoing

</>
VueJS / ElectronJS

 An application that analyses students' generated Moodle logs and performs sentiment analysis from forums' chats. Starting from Jan 2022, the software will be used in different Spanish Universities and schools (La Salle URL, UPC, URV, etc).

Heterogeneous Computing Farm

Graduation Thesis

Mov 2021 - Ongoing

 The purpose of this work is twofold. On one hand, a multi-layered distributed architecture will be designed to allow the deployment of several heterogeneous computing nodes on the edge. On the other hand, a software that determines the viability of the execution of the software to be deployed in the system, while optimising the use of resources, will be developed.

PROJECTS

Hello World

Personal Portfolio - Github Repository

May 2021 - Ongoing

</>> Front-end: React

 My personal portfolio build with ReactJS, originally hosted in my Pi 4 server with Docker (Currently under maintenance). Now hosted in Github Pages.

PDF Form Filler

TEEM 2021 European Conference - Github Repository

Oct 2021 - Ongoing

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Pvthon

- Revamped PhD. Juan Cruz-Benito's open-source app that generates certificates filling PDF forms with data from CSV files.
- Integrated auto-mailing system after certificate generation.
- Technological Ecosystems for Enhancing Multiculturality European conference.

LoL Champ Selector

University Project- Github Repository

March 2021 - June 2021

Back-end: Java & Front-end: ElectronJS

 A full-stack League of Legends chatbot. gRPC powers the communication between Electron client and Java server. It includes NLP leverage from DialogFlow.

GeoReplication

University Project - Github Repository

• Data replication in a Distributed/Edge Computing system for data availability and reliability.

Sallefy

University Project - Github Repository

March 2020 - July 2020

</> Java - Android

• A cloud streaming platform developed for Android mobile devices.