Javier Vidal Ruano

+34 000 000 000

email@gmail.com

/javiervidrua

/users/15609176/javiervidrua

/in/javiervidrua

Work experience

Researcher, developer – ESALab · *02/2021 – 08/2021*

- Full stack development with the MEVN stack for a real-time web application. The CTO loved how it came out.
- Back-end APIs development using Node.js, Socket.io, MQTT and Heroku for a real-time system.
- Linux system administration for a real-time application including HTTP server (Nginx), DNS (Bind9) and MQTT server (mosquito) setup and general sysadmin tasks like AV and firewall configuration and system hardening with tools such as Fail2Ban and Endlessh. Implemented a Bash script for a quick deploy, saving hours of work.
- ROS development in C++ for Arduino Nano and ESP32 boards. It involved front-end development with HTML5, CSS3 and JavaScript, to create a webpage that allows the user to manage the robot in real-time.
- Implementation of an open specification serial protocol in Python, designing a framework around it to facilitate the communication with an RFID tag reader via WebSocket.
- Design and development of virtual reality systems using Unity and UE4 to prevent occupational hazards in industrial environments, made to be run on HTC Vive Pro and Magic Leap One VR headsets.

Curricular internship: Software developer – ESALab · *07/2020 – 10/2020*

- Adaptation of a tool to detect and notify the compliance with social distancing rules in pedestrian streets to be deployed on a Jetson TX2. Used TensorFlow in Python3.
- Web application pentesting: Found and fixed several SQL injection and XSS vulnerabilities on LAMP servers.
- Front-end development using HTML5, CSS3 and JavaScript to create a webpage to manage barcodes.
- Industrial parts 3D modeling using Fusion 360 and Google SketchUp, combined with assembly, usage, and repairs of Prusa 3D printers.

Education

University of Salamanca · *09/2017 – 07/2021*

- Computer Engineering Degree. Average grade: 7.54/10 (3.016/4 GPA). End-of-degree project grade: 9/10. Technologies used and learned: C, Java, Tomcat, Python, Bash, Linux, Git, Vue.js, HTML5, CSS3, C++, Arduino, SQL, MongoDB, rsnapshot, DNS, VLAN, WLAN.

IES Mateo Hernández · *09/2015 – 06/2017*

- Average high school scientific baccalaureate. Average grade: 7.06/10 (2.824/4 GPA). Elected as the class representative every year.
- 1 week education abroad at Broadstairs, England.

Projects, activities, and awards

- TCUE Market-Driven prototypes contest 2021 award and scholarship program.
- Javiervidrua.github.io: A personal webpage made with Bootstrap and hosted on GitHub pages. Contains a blog made with Jekyll.
- URL shortener made with Python and Django, hosted on javiervidrua.pythonanywhere.com. Source code in my Github.
- Netdrop: Airdrop like tool made in Python using Websocket and P2P technology. Source code in my GitHub.
- Exploithelper: A command line tool made in Python to facilitate the development of a buffer overflow exploit. Source code in my GitHub.
- Autoconfiguredns: Script written in Bash that installs and configures a Bind9 server on your Debian-based system so in a matter of seconds, you have your own DNS server up and running. Source code in my GitHub.

Languages

- Spanish: Native
- English: Proficient (B2, 2015)