David Díaz Martín

Date of birth: 29/01/1978 | **Nationality:** Spanish | **Phone:** (+34) 637664197 (Mobile) | **Email:**

ddiazmartin.ddm@gmail.com

WORK EXPERIENCE

01/07/2024 – CURRENT MADRID, Spain
SENIOR SOFTWARE DEVELOPER NOLOGIN OCEANIC WEATHER SYSTEMS

- joining Observations Team (led by Alejandro Gallardo)
- maintenance of NRT operational services for Insitu TAC data worfkflow
- deployment of webservices applications based on containers environment
- analysis and improvement of legacy adquisition scripts based on python

01/09/2016 – 31/05/2024 Madrid, Spain
TECHNICAL DIRECTOR / CO-FOUNDER TRANS4TRONICA SLL

- definition of a Web App IoT software platform to retrieve, process and store data collected from a wide range of sensors
- definition and implementation of a relational SQL database to store IoT ecosystem data so that it can be observed and analyzed from our app or third-party software
- develop server-side Web App Java-based using Spring MVC pattern, Security, Maven, JDBC, Apache Tiles, Websockets and MQTT broker
- develop client-side Web App using front-end technologies like HTML, CSS, JavaScript, JQuery, AJAX and Bootstrap
- design hardware and firmware to create a portfolio of custom wireless sensors and gateways based on RF tecnologies (Sub 1GHz, LoRa, Sigfox, BLE, GPRS, GSM y GPS,) to collect data from remote locations
- analysis of third-party data acquisition systems, devices and software to integrate into same unique platform
- design and implementation of a REST API interface using JSON, XML and JWT token Authentication

06/03/2008 – 31/08/2016 Madrid, Spain
FIRMWARE AND SOFTWARE DEVELOPER DELCOM TELECOMUNICACIONES Y SISTEMAS SL

- definition of a embedded system's master-slave communication model with innovative, cost-effective and scalable distributed intelligence
- development of native mobile app for data storage and visualization with Android Studio
- design of C++ and Java desktop applications to configure and control custom hardware through severals propietary protocols
- implementation of a Integral Security System for Shoppings Centers (anti-intrusion, anti-theft, CCTV, fire detection, CRA)
- implementation of a Integral Security System for Office Centers and Ports (access control, traceability, logistic)

01/03/2001 – 05/03/2008 Madrid, Spain
ELECTRONICS ENGINEERING TECHNICIAN DELCOM TELECOMUNICACIONES Y SISTEMAS SL

- programming and debugging of 8-32-bit microcontrollers (Freescale, Microchip, Rabbit)
- implement tecnologies for access control readers (RFID/NFC/Biometric/Barcode, Wiegand, ABA/TRACK, RS232, Dallas iButton, Corporate1000)
- working on bus communication protocols (Ethernet, RS485, RS422, 1Wire, CAN, Contact ID)
- design of digital and analogic electronics circuits (schematic, PCB routing, assembly and testing)
- diagnose and repair electronics components and systems (oscilloscope, signal generator, spectrum analyser...)
- supervise certification process for CE marking and UNE-EN

EDUCATION AND TRAINING

01/06/2017 – 01/12/2018 Madrid, Spain
HIGHER TECHNICIAN IN DEVELOPMENT OF WEB APPLICATIONS Instituto Fomento Ocupacional

- Server Management (installation, maintenance and monitoring for web and web-application servers, deployment)
- Database Management (logical design and verify data integrity, consistency, security and accessibility)
- Web Development in Client Environment (handle and validate user input, render and present data to the user)
- Web Development in Server Environment (database access, security and authentication criteria
, third-party services access)
- Web Interfaces Design (interactivity, accessibility and usability)

Level in EQF EQF level 5

01/09/2014 – 01/06/2016 Madrid, Spain
HIGHER TECHNICIAN IN MULTI-PLATFORM APPLICATIONS DEVELOPMENT Instituto Fomento Ocupacional

- Database Management (logical design and verify data integrity, consistency, security and accessibility)
- Interface Development (design graphical XML-based interfaces with interactive and adequate usability)
- Multimedia Programming and Mobile Devices (database access, forms and reports, games and applications for mobile, pda, tablet, wearable)
- Services and Processes Programming (parallel programing, multi-threaded, network communications)
- Business Management Systems (identify, adapt and develop components for ERP-CRM systems)

Level in EQF EQF level 5

01/09/2011 – 01/03/2012 Madrid, Spain
CERTIFIED C PROGRAMMER Universidad Católica de Ávila

- Analysis and Design of Algorithm
- Structured Programming and Modular Design
- Handling Pointers, Structures and Files
- Dynamic Memory Allocation
- Searching, Sorting and Recursion Techniques

LANGUAGE SKILLS

Mother tongue(s):   **SPANISH**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	B2	B2	B2	B2	B2

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user

DIGITAL SKILLS

high level programming

Java │ JAVA EE (JSP & SERVLET) MVC │ JAVA SPRING │ PHP │ Python │ HTML5 │ CSS │ JavaScript │ JQuery │ AJAX │ XML │ JSON │ Bootstrap │ RESTful api │ JWT Tokens │ SQL │ Client-server applications │ Tomcat server

low level programming

C++ │ C │ ASSEMBLER │ CodeWarrior │ NXP MCUXpresso │ Kinetis Design Studio │ Borland C++ Builder │ MBED STUDIO │ RTOS design and implementation │ TCP, UDP, MQTT, Websocket

electronic design

PCB Design & Layout │ Oscilloscope and Testing devices │ Freescale MCU │ ARM-32-bit │ RS232, RS485, TCP/IP │ I2C, SPI, UART │ Bluetooth, WIFI, NFC, RFID │ 868MHz and 2.4GHz radio │ GSM, GPS, GPRS modules │ IoT sensors