KEVIN DUCONGE

FRONT END DEVELOPER

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○ DETAILS ○

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• LINKS •

in <u>LinkedIn</u>

GitHub

• SKILLS •

JavaScript

TypeScript

日日 HTML 5, CSS 3

React.js

Node.js

Bootstrap

Sass

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MongoDB, MySQL

Firebase

Docker

PHP

Java, Python

• LANGUAGES •

French

English

Spanish

Arabic

• HOBBIES •

Cooking, Board games, New Technologies

PROFILE

JavaScript fan with 10+ years of coding in that language. I love keeping up-to-date with the latest technologies and using code to create, to solve problems and to automate processes to simplify my work and day-to-day life.

EMPLOYMENT HISTORY

Front End Developer, London

March 2021 — Present

I've been working on <u>personal projects</u> using technologies like React, Next.js, Node, Typescript, Docker, Firebase.

UX Specialist at MathWorks, Cambridge, UK

October 2018 — February 2021

User Experience Specialist for the Code Integration and Dynamic Verification team at MathWorks.

This team specializes in providing tools to help users simulate and verify their models and generated code directly on hardware.

- **User Research:** study current user workflows, use cases, identify user pains through UX studies (questionnaires, on-site/remote software/feature tests with customers, interviews, etc.)
- **UI Design and Prototyping:** JavaScript mockups, Agile design, iterations with stakeholders, applied UX principles

Application Support Engineer at MathWorks, Cambridge, UK

January 2018 — October 2018

- Providing support for MathWorks users, specializing in Simulink tools.
- Design, implementation, and support of the team's website (JavaScript, Node.js with Express, HTML, CSS).

****** INTERNSHIPS

Application Support Engineer – Internship at MathWorks, Cambridge, UK

February 2017 — July 2017

Technical Support:

- Fully ramped up on MathWorks products (MATLAB, Simulink, toolboxes), how to use and support them.
- Solved customer support cases (by phone or email), build customer relationships and trust, gained experience understanding, explaining, teaching, talking to customers.
- Experience working as a team to solve cases, reaching out for help and help on certain complex cases.

Project:

 XCP (Universal Measurement and Calibration Protocol) Minion Integration Testing, using C/C++

Application Support Engineer - Internship at MathWorks, Cambridge, UK

July 2016 — September 2016

Technical Support:

- Resolving customers' issues in the most efficient way.
- Learnt a lot about MathWorks products, how to use and support them.
- Improved my communication skills through interactions with team members, customers.

Project:

- Learn and present the capabilities of the Robotics Toolbox algorithms in Simulink.
- Created a Demo model to control a robot, map its environment and react accordingly.
- Reported to the team and presented the project during the company intern presentations.

EDUCATION

Master's degree, Embedded Systems, Electrical and Electronics Engineering, INSA (National Institute of Applied Sciences), Toulouse

2012 — 2017

University of Texas at Austin, Austin, Texas

August 2014 — December 2014

One semester of studies abroad in Electrical Engineering

- Introduction to Embedded Systems (Lab): Assembly and C language programming on ARM Cortex M4, creation of a game (based on Space Invaders)
- Introduction to Automatic Control
- Fundamentals Electronic Circuits (Lab): Semiconductor devices (diodes, bipolar junction and metal-oxide-semiconductor transistors), amplifier design and analysis
- Science Baccalaureate, Option Mathematics, Lycée Jeanne d'Arc, Clermont-Ferrand 2011 2012

★ PROJECTS

XCP Minion Integration Testing, MathWorks, Cambridge. UK

May 2017 — June 2017

XCP is the Universal Measurement and Calibration Protocol, usually used in the automotive industry.

MathWorks has been developing its own XCP Minion, and the project I worked on aimed to deliver an integration testing framework for it.

The integration tests involved testing the minion responses to individual commands, or sequences of commands.

Solution and deliverable included an extended version of an XCP Master developed in C/C++, a MATLAB based Integration testing framework using this master, and tests for the minion written in MATLAB.

See project

Autonomous Toy Car C API, INSA, Toulouse

October 2016 — January 2017

Created 2 APIs (low-level and high-level) to easily program and control an autonomous toy car.

Created Nucleo STM32 board semi-automatic diagnostic tools.

Worked in a team of 6 people, in an Agile environment with sprints every 3 weeks.

Controlled a toy car using a Raspberry Pi3 and a NUCLEO-F103RB interfaced to the motors (direction and drive wheels) and sensors (hall sensors for the wheels speed and direction stop, ultrasounds for the obstacle detection).

Programmed the STM32F103RB microcontroller using Keil v5 and STM32CubeMX.

See project

Real-time server robot control, INSA, Toulouse

April 2016 — May 2016

Design and implementation in C++ of a real-time server program to control a mini robot via a client application.

Keyboard guitar with touch buttons, INSA, Toulouse

March 2016 — April 2016

Object-oriented design and programming in C++ of a keyboard guitar on Intel® Galileo.

Nitinol Stiquito robot, INSA, Toulouse

December 2015 — May 2016

Design and microcontroller programming of a mini robot with Flexinol® leg muscles (Stiquito robot)

Sailboat control, INSA, Toulouse

October 2015 — November 2015

Design and programming of a sailboat control system managed by microcontroller (STM32-H103 board)

Space Invaders game on hardware, The University of Texas at Austin, USA

December 2014

Assembly and C programming on ARM Cortex M4 using Keil v4.

Hardware:

- Texas Instruments Tivia C Series LaunchPad board (EK-TM4C123GXL)
- Red SparkFun Nokia 5110 LCD screen (LCD-10168)
- Slide potentiometer (to control the position of the player laser cannon)

Y EXTRA-CURRICULAR ACTIVITIES

Mission on Mars Robot Challenge 2016 by MathWorks, Paris

March 2016 — May 2016

- Member of the winning team of the "Mission on Mars Robot Challenge 2016" organized by MathWorks.
- MATLAB/Simulink programming of the Rover's exploration algorithm.

Treasurer at Grimoire, Cultural Club of INSA Toulouse, Toulouse

2012 - 2016

1 REFERENCES

References available upon request