# **Oscar Forner Martinez**

I am a software engineer who likes challenges when working in a project, I really enjoy applying elegant algorithms and advanced data structures to solve problems in an efficient and elegant way. Moreover, I am interested in topics such as Linux Kernel and Compilers.

## Experience

### 2015-Present Software Developer at Programming Research Ltd.

I have been working in a couple of projects during my time at Programming Research.

- -Static analysis of code: Checks if the code has some patterns that have an undefined behaviour, unspecified in the Standard, and/or implementation-defined.
- -Dataflow analysis of code: Checks the complexity of methods, pointer problems, memory handling, etc.

In addition, I had to take over two projects to refactor, maintain and add new features.

#### 2013-2015 Software Engineer at European Bioinformatics Institute

One of my duties was to create a RESTful service to allow users to query for information about multiprotein complexes.

In addition, I developed an algorithm to cluster biological information from proteins.

#### 2013-Present Open Source

I am actively contributing to open source projects that I find interesting and challenging. Some of my contributions can be found in my **GitHub profile**.

**Linux Kernel**: I am interested in topics such as **Scheduler** and **Device Drivers**. I am currently taking the **Eudyptula Challenge**.

**Prefix Tree Comparison**: Compare performance for different *Trie*, *Ternary Search Tree* and *Radix Tree*.

**ARM C Compiler (ACC)**: I am creating a **self-hosting compiler** for **C** in the **ARM** architecture.

#### Courses

April 2016 LFD331: Developing Linux Device Drivers; Linux Foundation

March 2016 LFD320: Linux Kernel Internals and Debugging; Linux Foundation

August 2015 Agile for developers; Accelebrate

**Education** 

**2010-2013** Bachelor of Engineering in Computer Science; Universitat Jaume I (Spain)

Advanced Data Structures, Compilers and Interpreters and Distributed Systems

**2006-2010** Associate Degree in Computer Science; Universitat Jaume I (Spain)

Operating Systems, Real Time Operating Systems and Embedded Systems

**Programming Languages** 

C++ 3 year experience using C++11/14 and Boost.

**C** 3 year experience.

**ARM** A few months of experience.

Python and

Good knowledge with scripting purposes.

**Bash** 

**Technical Skills** 

Methodolo- Design Patterns, Object Oriente Programming/Design.

gies Agile

le Scrum, Kanban, Code Review, Pair Programming and TDD.

Unit Test Google Test, Google Mock, Unity and FFF.

**Libraries** Boost, Protocol Buffers and LLVM.

Debugger GDB, LLDB and Mozilla rr.

Build Make, CMake, Maven and Gradle.

CI Jenkins and Travis.

VCS Git, Subversion and Mercurial.

Tools Cling, Clang-tidy, Clang-modernize, Clang-format, Ctags and Cscope.

Analysis Clang-sanitizer, PRQA Framework, Coverity, Perf and Valgrind.

Languages

Spanish Native

**English** Fluent

oscar.forner.martinez@gmail.com

+44 (0)75 96944383

Blog: http://maitesin.github.io/

LinkedIn: https://www.linkedin.com/in/oscarforner

GitHub: https://github.com/maitesin 283A Hersham Road - Walton-on-Thames, KT12 5PZ