

Francis Visoiu Mistrih

Education

- 2012 – 2017 **Master's degree in Computer Science**, EPITA, Le Kremlin Bicetre, GISTRE.
Software engineering and embedded systems.
- 2014 **Exchange semester**, Ewha Womans University, Seoul, South Korea.
Computer Science

Experience

- 2017 **Compiler Engineer**, Apple, LLVM Compiler Backend.
Improvement of the LLVM code-generator.
- 2017 **Internship**, Apple, LLVM Compiler Backend.
Improvement of shrink-wrapping, a code-generation optimization in LLVM.
- 2016 **Student Researcher**, LSE, EPITA.
Student researcher working on different low-level projects, from compilers to kernel development.
- 2014 - 2017 **Teaching Assistant**, EPITA, C++, C, UNIX, compiler construction, data structures.
Teaching assistant for 2nd and 3rd year students of EPITA. Maintainer of the Tiger Compiler project.
- 2015 **Internship**, Aldebaran Robotics, C++.
Software engineering internship. Implemented shared memory in the C++ SDK.
- 2014 **Internship**, Mobeye, iOS, Django.
Development of an iOS app and back-end API with Django in a startup.

Projects

- 2016 **J2 LLVM Backend**, LSE, C++11, LLVM.
LLVM Backend for the J2 Core with support for clang and lld.
- 2016 **nolimix86**, C++14, LLVM, x86.
x86 emulator with infinite virtual registers. Inspired from nolimips.
- 2015 **Tiger Compiler**, EPITA, C++14, LLVM, x86, MIPS.
Compiler for the Tiger language. Front-end, back-end and LLVM IR.
- 2015 **MP2P**, C++14, Boost.Asio, UNIX.
File transfer software using a custom protocol.
- 2015 - 2016 **Scholar projects**, EPITA, C, x86, Linux.
x86 kernel, x86 virtual machine based on KVM, Linux usb driver, parallel programming.
- 2014 - 2015 **Scholar projects**, EPITA, C, C++.
POSIX shell, HTTP server, GNU Make clone, custom memory allocator, custom C++ container (STL-like).

Programming languages

C++	Experienced	C	Experienced
Python	Familiar	Objective-C	Familiar
Java	Beginner	C#	Beginner

Skills

General	Compilers, LLVM, Clang, C++14, Boost	Low-level	x86, KVM, kernel programming
Tools	Vim, Git, CMake, gdb, Xcode, zsh, LaTeX	OS	Linux, Mac OS X

Languages

French	Native	English	Advanced - TOEIC 955
Romanian	Native	Spanish	Beginner