

Mário Feroldi Filho

CONTACT INFORMATION	Phone: +55 18 99796-9367 Email: mferoldif@gmail.com	github.com/feroldi linkedin.com/in/mferoldif
EDUCATION	Salesiano Auxilium Catholic University , Araçatuba, Brazil <i>B.S., Computer Engineering</i> <i>GPA: 3.45/4.0</i>	Feb 2015 – Dec 2019
PROFESSIONAL EXPERIENCE	Grupo Saludem , <i>Software Engineer Intern</i> <ul style="list-style-type: none">Developed a clinical appointment scheduling mobile application for the AME clinics with the Flutter SDK.Developed, maintained and contributed to the clinical and hospitalar management system.Trained interns to use the Github workflow in the development process.	Jan 2019 – present
RESEARCH EXPERIENCE	Salesiano Auxilium , <i>Undergraduate Research</i> <ul style="list-style-type: none">Researched compiler optimizations in code generation for multiple processor architectures.Elaborated on instruction selection and the pattern matching and selection problem.Researched how LLVM, GCC and superoptimizers select instructions and generate quality code. Salesiano Auxilium , <i>Undergraduate Thesis</i> <ul style="list-style-type: none">Researching the Regionalized Value State Dependency Graph (RVSDG) as an intermediate representation (IR) for multiple compiling stages.Implementing the compiler's back end as a pipeline of transformations on the RVSDG, turning it from higher to lower level at each pass.Avoiding duplication of effort when implementing common optimizations for different IRs, such as constant propagation.	Aug 2018 - Jun 2019 Feb 2019 - Dec 2019
PERSONAL PROJECTS	CCI: C11 Compiler Infrastructure <ul style="list-style-type: none">Developing a compiler infrastructure to manipulate and compile C code.Meant as a personal research project to acquire hands-on experience on compiler engineering.Used C++17 for development, GoogleTest for unit tests, and CMake for the build system. Ruke: A microkernel experiment <ul style="list-style-type: none">Created a microkernel for the x86 architecture.An experiment with the Mozilla's Rust programming language.Used Rust for most of the development, and x86 Assembly for the low-level bits. Cognita: A flashcard system mobile application <ul style="list-style-type: none">A system to optimize the learning process of any subject by using the principle of spaced repetition.Implemented the Leitner system for the training sessions.Used the Flutter framework, and the SQLite embedded database.	github.com/feroldi/cci github.com/feroldi/ruke github.com/feroldi/cognita
LANGUAGES	Advanced English Native Portuguese	
TECHNICAL SKILLS	Bash, C, C++, C#, Dart, Flutter, GNU/Linux, Git, Java, POSIX, PostgreSQL, Python, Rust, SQLite, x86 Assembly	
OTHERS	Top 10% on the C++ tag on Stack Overflow Placed 348th out of 1156 at the XXIII Maratona SBC First Phase Undergraduate Teaching Assistant for Compilers Gave a presentation to my class on C++14 and its features Undergraduate Teaching Assistant for Programming Logic and Algorithms	since Jan 2019 Sep 2018 Aug 2018 Aug 2016 Jan 2015