

Luciano Enrique Laratelli

luciano@laratelli.com | Tampa, FL, 33617

EDUCATION

- **Master of Science in Computer Science** May 2021
• *GPA: 3.6—University of South Florida—Tampa, FL*
Electives: Advanced Databases, Automated Reasoning, Compilers, CUDA, Computational Physics (MPI)
- **Bachelor of Science in Chemistry** May 2018
• *GPA: 3.31—University of South Florida—Tampa, FL*

SKILLS

- **Computer Languages:** Intermediate proficiency in: C (4 years), C++ (4 years), Python (4 years), and Bash (4 years). Novice with javascript (1 year), PostgreSQL (1 year), and Java (half a year).
- **Computer Platforms and Frameworks:** Intermediate proficiency with CUDA and MPI.
- **Software Engineering Tools:** Intermediate skill in: GDB/LLDB, Git, and CMake.
- **Spoken Languages:** Native English and Native Spanish.
- **Operating Systems:** Proficient with Microsoft Windows, macOS, Arch Linux (1 year), Debian (4 years), Ubuntu (6 years), iOS, and iPadOS.
- **Software:** Emacs, Vim, PyCharm, CLion, WebStorm, Microsoft Office (Word, Excel, PowerPoint,) Apple iWork (Pages, Numbers, Keynote.)

PROJECTS

- **dj2ll:**
dj2ll is an extension of the dj2dism compiler. It reuses the front end components(lexer, parser, typechecker) but implements an entirely new backend using the LLVM C++ API.
- **dj2dism:**
dj2dism is a non-optimizing compiler for a Java-like object-oriented language, “diminished Java (DJ)”. The compiler generates a RISC-like instruction set for a provided virtual machine. This semester-long project involved interpreting the language specification into the five main components of a compiler: lexer (using Flex), parser (using Bison), AST generation (using Bison semantic actions), type-checker, and code generator. The type-checker and code generator are implemented in C89. **Source code is available upon request.**

WORK EXPERIENCE

- **Technical Expert** February 2020—Present
• *Apple Retail Genius Bar—Tampa, FL*
The responsibilities of this role expand on those of the Technical Specialist to include hardware repair of iPhone and the mentoring and training of Technical Specialists.
- **Technical Specialist** July 2019—February 2020
• *Apple Retail Genius Bar—Tampa, FL*
This role requires the assessment and resolution of software issues that occur with iPhone, iPad, and Apple Watch. This involves combining customer education, application of domain-specific technical knowledge, and the ability to read, understand, and present information from documentation in real time. Consistently in the top five of Genius Bar employees for sessions per hour and session duration, out of a team of around 100 employees. Assisted most customers in Q4 2019.
- **Graduate Researcher** May 2018—May 2019
• *USF Space Group—Tampa, FL*
Responsible for conducting independent research, mentoring undergraduates, and contributing to the lab’s code base, a program called MPMC. Designed and implemented a parallel **end-to-end testing suite** for the lab’s code base that supports various execution modes. Several improvements to the lab’s code base were made by refactoring important sections, adjusting the build system to achieve cross-platform compilation, increasing output functionality, and constructing and adding a new set of simulation parameters.