

Gilberto L. Pérez

Software Engineer

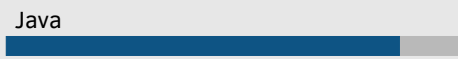
✉ 2870 N Towne Ave
Apt 140
Pomona CA, 91767

☎ 323.395.7356

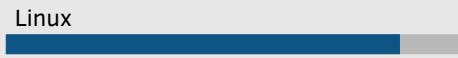
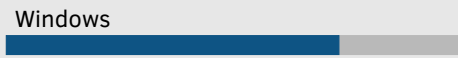
🌐 www.gilberto-perez.net

@ gilberto.limon.perez@gmail.com

Programming Languages



Operating Systems



Software and Tools



Education

2014-2016 Master of Science University of California, Irvine
Computer Science

2006-2012 Bachelor of Science California State Polytechnic University, Pomona
Majoring in Computer Science with a minor in Mathematics

Experience

05.2017-Present Senior Software Engineer Investment Technology Group/Virtu Financial

- Implemented symbol and currency conversion logic in C++ for a performance sensitive order processing and routing system. Improved performance by 15% and maintainability while expanding functionality.
- Developed a load balancing record publishing utility in C++.
- Migrated large code base from Clearcase to Git and designed a new development procedure for it.
- Wrote SQL queries over complex client configurations, orders and reports tables.
- Expanded functionality of Perl scripts used by admins to monitor production systems.
- Modernized and expanded capabilities of NCurses based admin GUI tool.
- Deployed automation server (Jenkins) to facilitate continuous integration and continuous delivery.

3.2015-7.2017 Graduate Student Researcher University of California, Irvine

- Developed a parallel finite element model alongside Jet Propulsion Laboratory (JPL) scientists in C++/Python/MATLAB.
- Configured and administrated a continuous integration testing suite with a web dashboard (Jenkins).
- Deployed Amazon cloud instances as a computational servers for NASA science outreach.

9.2016-3.2017 Lecturer California State Polytechnic University, Pomona

- Prepared lesson plans, lecture slides, homework assignments and examinations for various courses.
- Hired and trained graders to help with course work.
- Developed an automated examination generator as well as an automated project grader.

2.2012-9.2014 Intern Jet Propulsion Laboratory

- Ported complex finite element model ISSM to the Android platform (C++, Java).
- Mentored new interns.
- Maintained portability of software to major platforms (MacOS, Windows, Linux).

Projects

2019 Lineup Optimizer Python
Absorbing Markov Process baseball run production model to optimize lineup construction. Implemented in Python using Numpy.

2017 Sudoku Solver Java
Constraint propagation with backtracking Sudoku Solver. Generic base Sudoku implementation (eg 9×9, 16×16). Received performance based extra credit for graduate AI course.