# OLIVER CHANG

Miami, Florida          +1-727-771-3641          oliver@oychang.com

## Education

University of Miami—Coral Gables, FL
**BS, Computer Science and Geography** May 2016
Mathematics Minor—GIS Certificate Program—General and Departmental Honors—3.86 GPA

## Professional Experience

Parallel Computing Institute, University of Illinois, Urbana-Champaign—Urbana, IL
**Research Assistant (REU),** May 2015–July 2015
- Profiled nek5000, a Fortran MPI fluid dynamics simulator, to evaluate calculation/communication optimizations
- Pushed scaling limits of nek software against Blue Waters' hardware to achieve a 5% speedup on PGI compilers

Mobile, Pervasive, Autonomous Communication Technology Lab, Florida International University—Miami, FL
**Research Assistant (REU),** January 2015–Present
- Worked collaboratively with two others to create localization tools based on WiFi and LTE alternatives to GPS
- Created Android app for training & localization via WiFi using modern best practices like Fragment & DataProvider

Computer Science Department, University of Miami—Coral Gables, FL
**Undergraduate Teaching Assistant,** August 2014–Present
- Reviewed Java code for Intro to Programming with an emphasis on idiomatic, readable code
- Challenged small labs of Intro to Data Structures & Algorithms students with visualizations emphasizing edge cases

Physical Oceanography Distributed Active Archive Center, NASA Jet Propulsion Laboratory—Pasadena, CA
**Science Data Engineering & Archiving Intern,** June 2014–August 2014
- Consolidated existing metadata checkers for netCDF into a Python framework with verifiable suggestions
- Lowered cost & difficulty of compliance by creating a RESTful platform over a dependency-heavy local installation

Senzari, Inc—Miami, FL
**Software Engineering Intern,** March 2013–May 2014
- Led visualization for a Django dashboard written with Google Charts & CoffeeScript used to track visitor analytics
- Built one of the first FirefoxOS Apps in HTML5/jQuery Mobile to construct graph queries, once rated 4 stars

## Skills

- Proficient in Python, JavaScript, Java, Unix, C, Android SDK
- Working knowledge of Fortran, Ruby, R, UML Modeling, API Design, LaTeX

## Activities & Honors

- "Improving Compliance for Earth Science Data Records" poster presented to Fall 2014 AGU
- Trained in engineering ethics by the National Center for Professional & Research Ethics
- Vice President of University of Miami's Association for Computing Machinery (ACM)
- Tutor for University of Miami's Camner Academic Resource Center (ARC)
- Recipient of the National Merit Scholarship
- Proficient in conversational French