

# Oliver Chang

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## EDUCATION

### Rice University, Houston, Texas, USA

- Ph.D. in Computer Science  
• Advisor: Prof. Swarat Chaudhuri

Aug 2016 – Present

### University of Miami, Coral Gables, Florida, USA

- B.S. in Computer Science  
• 2nd Major: Geography; Minor: Mathematics  
• Geographic Information Systems (GIS) Undergraduate Certificate  
• Graduated Magna Cum Laude with General and Departmental Honors  
• Cumulative GPA: 3.8/4.0

Aug 2012 – May 2016

## RESEARCH EXPERIENCE

### Rice University, McNair Center for Entrepreneurship & Innovation

- Graduate Student Assistant  
• Project: Verified and Reproducible US Patent Data  
• Supervisor: Dr. Edward Egan

May 2017 – Present

### Florida International University, Electrical & Computer Engineering Department

- REU Student, Mobile, Pervasive, and Autonomous Technologies Lab  
• Project: Localization via Signal Strength & Probe Requests on Android devices  
• Supervisor: Prof. Ismail Guvenc

Oct 2015 – May 2016

### University of Illinois, Urbana-Champaign, Department of Computer Science

- REU Student, Scientific Computing Group, Parallel Computing Institute  
• Project: Optimization Opportunities for nek5000 on the Blue Waters Supercomputer  
• Supervisor: Prof. Paul F. Fischer

Jun 2015 – Aug 2015

### National Aeronautics and Space Administration, Jet Propulsion Laboratory

- Summer Intern, Physical Oceanography Distributed Active Archive Center  
• Project: Automating Metadata Compliance Checking  
• Supervisors: Edward M. Armstrong and George Chang

Jun 2014 – Aug 2014

## PUBLICATIONS

### JOURNALS

- [1] Ryan J. Bunting et al. “Spatial Patterns of Larceny and Aggravated Assault in Miami–Dade County, 2007–2015”. In: *The Professional Geographer* (May 2017), pp. 1–13. ISSN: 1467-9272. DOI: 10.1080/00330124.2017.1310622. URL: <http://dx.doi.org/10.1080/00330124.2017.1310622>.

### POSTERS

- [2] Oliver Chang. “GPS & WiFi Choke Point Analysis”. In: *University of Miami GIS Day*. 2015.
- [3] Oliver Chang, Michael Zoller, and Paul Fischer. “Analyzing the Scalability of Nek5000”. In: *Passionate on Parallel Poster Day*. 2015.
- [4] Oliver Chang, Edward M. Armstrong, and David Foster. “Improving Compliance for Earth Science Data Records”. In: *Fall Meeting of the American Geophysical Union*. 2014.

## AWARDS & SCHOLARSHIPS

- CAV Student Fellowship  
Covered attendance costs to the 29th International Conference for Computer Aided Verification in Heidelberg, Germany  
Jul 2017
- Outstanding Computer Science Undergraduate, University of Miami  
Awarded by the faculty of the computer science department to a single graduating student.  
May 2016
- National Merit Scholarship  
Supported by the National Merit Scholarship Program for four years  
Aug 2012 – May 2016

## OUTREACH & MENTORSHIP

### Houston Action Rescue Team (HART), Rice University

- Graduate Project Supervisor  
• Supervised and led research focus for a group of four undergraduate students  
• Interfaced with local sponsors like the Memorial Park Conservancy to satisfy research goals

Aug 2017 – Present

**Graduate Student Association (GSA), Rice University**

- Social Programming Director Apr 2017 – Present
  - Planned and executed large picnics for the Rice graduate student community by interacting with food and entertainment vendors and university administration
  - Co-designed 2017 Orientation events to introduce 607 new graduate students to a new campus and city
- Graduate-Undergraduate Mentor
  - Engaged upper-level undergraduate mentees with alternatives to careers in industry like work-study and masters programs

**Designing with Rice Engineers—Achievement through Mentorship (DREAM), Rice University**

- Highschool Mentor Jan 2017 – Apr 2017
  - Led seven junior-level students in the application of the physics principles necessary to construct a simple catapult
  - Taught a self-prepared lecture about scholarships, grants, federal & state funding using personal examples to demystify college affordability

**Association for Computing Machinery, University of Miami**

- Vice President Aug 2015 – May 2016
  - Participated in 2016 ACM Southeast International Collegiate Programming Competition
  - Sought to engage CS department faculty with their professional organization

**Camner Academic Resource Center, University of Miami**

- Peer Tutor Jan 2014 – May 2016
  - Oversaw study groups of 1-6 students for introductory and intermediate level courses in computing
  - Certified International Tutor by the College Reading & Learning Association
  - Nominated for Sheila Dube Outstanding Tutor Award

**PROFESSIONAL  
EXPERIENCE**

**REConsole, Inc., Fort Lauderdale, Florida**

- Software Engineering Intern Jan 2016 – May 2016
  - Investigated errors in Extract-Transform-Load (ETL) process to resolve geographical parsing errors.
  - Bundled together ETL scripts with Spark, ElasticSearch, and PostgreSQL on Google Compute Engine nodes to automate a days worth of manual work.