

Oliver Chang

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EDUCATION

Rice University, Houston, Texas, USA

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

Aug 2016 – Mar 2018

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 – Jan 2018

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

PROFESSIONAL EXPERIENCE

REConsole, Inc., Fort Lauderdale, Florida

- Software Engineering Intern
- Automated a day's worth of manual engineering work by automating the data extract, transform, load (ETL) pipeline into a reproducible process built with Kubernetes, Apache Spark, Elasticsearch, and PostGIS
- Worked with Lead UX Designer to systematically reduce geographical parsing errors or to find alternative methods of representing real estate transaction data

Jan 2016 – May 2016

Senzari, Inc., Miami, Florida

- Software Engineering Intern
- Led visualization team for a Django business intelligence dashboard written with Google Charts & CoffeeScript used by customers like Telefonica
- Built one of the first Firefox OS Apps in HTML5/jQuery Mobile to explore, listen, and visualize music network graph queries

Mar 2013 – Apr 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 Jul 2017
Covered attendance costs to the 29th International Conference for Computer Aided Verification in Heidelberg, Germany
- Outstanding Computer Science Undergraduate, University of Miami May 2016
Awarded by the faculty of the computer science department to a single graduating student.
- National Merit Scholarship Aug 2012 – May 2016
Supported by the National Merit Scholarship Program for four years

OUTREACH & MENTORSHIP

Houston Action Research Team (HART), Rice University

- Graduate Project Supervisor Aug 2017 – Dec 2017
 - 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

Graduate Student Association (GSA), Rice University

- Social Programming Director Apr 2017 – Apr 2018
 - 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 (ICPC)
 - 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