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

Aug 2012 – May 2016

- 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

RESEARCH EXPERIENCE

Rice University, McNair Center for Entrepreneurship & Innovation

Graduate Student Assistant

May 2017 – Present

- $\bullet\,$ Project: Verified and Reproducible US Patent Data
- Supervisor: Dr. Edward Egan

Florida International University, Electrical & Computer Engineering Department

■ REU Student, Mobile, Pervasive, and Autonomous Technologies Lab

Oct 2015 - May 2016

- Project: Localization via Signal Strength & Probe Requests on Android Devices
- Supervisor: Prof. Ismail Guvenc

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

• REU Student, Scientific Computing Group, Parallel Computing Institute

Jun 2015 – Aug 2015

- Project: Optimization Opportunities for nek5000 on the Blue Waters Supercomputer
- Supervisor: Prof. Paul F. Fischer

National Aeronautics and Space Administration, Jet Propulsion Laboratory

Summer Intern, Physical Oceanography Distributed Active Archive Center

Jun 2014 – Aug 2014

- Project: Automating Metadata Compliance Checking
- · Supervisors: Edward M. Armstrong and George Chang

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 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

- 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

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.