Christopher S. Corley

Curriculum Vitae

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Research Interests

Software maintenance and evolution, machine learning in software engineering, mining software repositories, program comprehension, automating software engineering

Education

University of Alabama, Tuscaloosa, Alabama, USA
- PhD Computer Science, May 2018
- Dissertation: *Online Topic Modeling for Software Maintenance Using A Changeset-based Approach*
- Chair: Jeffrey C. Carver
- Advisor: Nicholas A. Kraft

University of Alabama, Tuscaloosa, Alabama, USA
- MS Computer Science, August 2014
- Advisor: Nicholas A. Kraft

University of North Alabama, Florence, Alabama, USA
- BS Computer Science, May 2011

Professional Experience

Coyote Logistics, Chattanooga, TN, 2016 – current
- Software Engineer
- Promoted to Senior Software Engineer in Spring 2019
- Promoted to Lead Software Engineer in Fall 2019

ABB U.S. Corporate Research Center, Raleigh, NC, 2015
- Visiting Researcher

University of North Alabama, Mathematics & Computer Science, 2010 – 2011
- Undergraduate Lab Assistant

University of North Alabama, Academic Resource Center, 2008 – 2011
- Undergraduate Computer Science Tutor

Fellowships and Awards

Graduate Assistance in Areas of National Need (GAANN) Doctoral Fellowship, 2011 – 2016

Research Assistantship – Improved Code Clone Categorization (NSF 0915559 & 0915403), 2011

Research Experience for Undergraduates, 2009 & 2010

Publications

Refereed Conference and Workshop Proceedings

M. Züger, **C.S. Corley**, A. Meyer, B. Li, T. Fritz, D. Shepherd, V. Augustine, P. Francis, N.A. Kraft, and W. Snipes, "Reducing Interruptions at Work: A Large-Scale Field Study of FocusLight" *2017 CHI Conference on Human Factors in Computing Systems* (CHI'17), Denver, Colorado, USA, 12 pages, May 2017 (acceptance rate: 25%). Honorable Mention Award.

C.S. Corley, K.L. Kashuda, and N.A. Kraft, "Modeling Changeset Topics for Feature Location", *31st International Conference on Software Maintenance and Evolution* (ICSME'15), Bremen, Germany, 10 pages, September 2015 (acceptance rate: 22%).

C.S. Corley, K. Damevski, and N.A. Kraft, "Exploring the Use of Deep Learning for Feature Location", *31st International Conference on Software Maintenance and Evolution* (ICSME'15) Early Research Achievements track, Bremen, Germany, 5 pages, September 2015 (acceptance rate: 35%).

C.S. Corley, F. Lois, and S.F. Quezada, "Web Usage Patterns of Developers", *31st International Conference on Software Maintenance and Evolution* (ICSME'15) Industry track, Bremen, Germany, 10 pages, September 2015 (acceptance rate: 36%).

C.S. Corley, K.L. Kashuda, D.S. May, and N.A. Kraft, "Modeling Changeset Topics", *4th Workshop on Mining Unstructured Data* (MUD'14), Victoria, British Columbia, Canada, 5 pages, September 2014.

N. Klein, **C.S. Corley**, and N.A. Kraft, "New Features for Duplicate Bug Detection", *11th Working Conference on Mining Software Repositories* (MSR'14), Hyderabad, India, 4 pages, May 2014 (acceptance rate: 37% for short papers).

A. Bosu, **C.S. Corley**, D. Heaton, D. Chatterji, J.C. Carver, and N.A. Kraft, "Building Reputation in StackOverflow: An Empirical Investigation," *10th Working Conference on Mining Software Repositories* (MSR'13) Mining Challenge, San Francisco, California, USA, 4 pages, May 2013 (acceptance rate: 41%).

C.S. Corley, E.A. Kammer, and N.A. Kraft, "Modeling the Ownership of Source Code Topics," *Proceedings of the 20th IEEE International Conference on Program Comprehension* (ICPC'12), Passau, Bavaria, Germany, 10 pages, June 2012 (acceptance rate 41%).

C.S. Corley, N.A. Kraft, L.H. Etzkorn, and S.K. Lukins, "Recovering Traceability Links between Source Code and Fixed Bugs via Patch Analysis," *Proceedings of the 6th International Workshop on Traceability in Emerging Forms of Software Engineering*, (TEFSE'11), Honolulu, Hawaii, USA, 7 pages, May 2011 (acceptance rate 44%).

Professional Activities

Program Committee Member

17th International Conference on Mining Software Repositories – Mining Challenge (MSR'20)
26th International Conference on Program Comprehension – Technical Research Track

(ICPC'18)

15th International Conference on Mining Software Repositories – Mining Challenge (MSR'18)

33rd International Conference on Software Maintenance and Evolution – New Ideas and Emerging Results Track (ICSME'17, previously ERA track)

32nd International Conference on Software Maintenance and Evolution – Early Research Achievements Track (ICSME'16)

31st International Conference on Software Maintenance and Evolution – Tool Demo Track (ICSME'15)

30th International Conference on Software Maintenance and Evolution – Tool Demo Track (ICSME'14)

50th ACM Southeast Conference (ACMSE'12)

External Reviewer

31st International Conference on Software Maintenance and Evolution – Early Research Achievements Track (ICSME'15)

8th IEEE International Conference on Software Testing, Verification, and Validation (ICST'15)

4th International Workshop on Combinatorial Testing (IWCT'15)

30th International Conference on Software Maintenance and Evolution – Early Research Achievements Track (ICSME'14)

7th International Workshop on Traceability in Emerging Forms of Software Engineering (TEFSE'13)

Conference and Workshop Attendance

31st IEEE International Conference on Software Maintenance and Evolution (ICSME'15)

30th IEEE International Conference on Software Maintenance and Evolution (ICSME'14)

4th Workshop on Mining Unstructured Data (MUD'14)

11th Working Conference on Mining Software Repositories (MSR'14)

22nd IEEE International Conference on Program Comprehension (ICPC'14)

20th IEEE International Conference on Program Comprehension (ICPC'12)

50th ACM Southeast Conference (ACMSE'12)

27th IEEE International Conference on Software Maintenance (ICSM'11)

8th Working Conference on Mining Software Repositories (MSR'11)

6th International Workshop on Traceability in Emerging Forms of Software Engineering (TEFSE'11)

48th ACM Southeast Conference (ACMSE'10)

Professional Memberships

IEEE, 2011 – 2015

IEEE Computer Society, 2011 – 2015

Association for Computing Machinery, 2008 – 2015
  – Local chapter (University of North Alabama) Student President, 2009 – 2011

ACM Special Interest Group on Software Engineering (SIGSOFT), 2012 – 2015

Teaching

Assistant, CS 250 - Programming II (Fall 2013, Spring 2014)
 – Primary Instructor: Nicholas A. Kraft
Assistant, CS 315 - Software Engineering (Spring 2013)
 – Primary Instructor: Nicholas A. Kraft
 – 100P course

Academic Service

Graduate Student Association Department Representative, 2014

Mentoring

Research Experience for Undergraduates Mentor, 2011 – 2014
 – 2014: Daniel S. May (BS student, Computer Science, Swarthmore College), Kelly L. Kashuda (BS student, Computer Science, University of Alabama)
 – 2013: Nathan Klein (BS student, Computer Science, Oberlin College)
Tide Together Peer Mentor, 2012 – 2014
 – 2014: Reginald L. Tucker (PhD student, Management, University of Alabama)
 – 2013: Erik R. Kline (PhD student, English, University of Alabama)
 – 2012: Matthew Jones (MFA student, Creative Writing, University of Alabama)
Tide Together Peer Mentor Student Leader, 2014 – 2015
 – 2014: Natasha Aduloju-Ajijola, Ana Rondon, Gabby Smith, Jean Swindle, Pandora White

Volunteering

Roberts Park Community Center, Raleigh, NC Co-instructor, Introduction to Programming, Summer 2015
30th IEEE International Conference on Software Maintenance and Evolution (ICSME'14) Student Volunteer, 2014
4th Workshop on Mining Unstructured Data (MUD'14) Student Volunteer, 2014
Alabama Robotics Competition Assistant & Judge, 2012 – 2015
Graduate Orientation and Welcome Volunteer, Fall 2014
Tuscaloosa Public Library Teen Zone: GeoTech Lab, Summer 2014
Women in STEM Experience Student Volunteer, Fall 2013
50th ACM Southeast Conference (ACMSE'12) Student Volunteer, 2012