

## Paige Rodeghero

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CONTACT INFORMATION	University of Notre Dame Computer Science and Engineering 326 Cushing Notre Dame, IN 46556	Work: +1-574-780-3030 E-mail: <a href="mailto:prodeghe@nd.edu">prodeghe@nd.edu</a> WWW: <a href="http://paigerodeghero.com">paigerodeghero.com</a>
RESEARCH INTERESTS	<b>Software Engineering:</b> Source code comprehension, Automatic source code documentation, Gamification of software engineering, Increasing developer productivity	
EDUCATION	<b>University of Notre Dame</b> , Notre Dame, IN  Ph.D., Computer Science and Engineering, Expected May 2018 <ul style="list-style-type: none"><li>• Thesis Topic: <i>Understanding Programmer Behavior to Improve Automatic Documentation Generation Algorithms</i></li><li>• Adviser: Professor Collin McMillan</li><li>• Area of Study: Software Engineering</li></ul> M.S., Computer Science and Engineering, August 2017 <ul style="list-style-type: none"><li>• Adviser: Professor Collin McMillan</li></ul> <b>Ball State University</b> , Muncie, IN  B.S., Computer Science, May 2013 <ul style="list-style-type: none"><li>• Minor: Dance Performance</li></ul>	
PUBLICATIONS	<ul style="list-style-type: none"><li>[1] <b>Rodeghero, P.</b>, Jiang, S., Armaly, A., McMillan, C., “Detecting User Story Information in Developer-Client Conversations to Generate Extractive Summaries”, in Proc. of the 39th ACM/IEEE International Conference on Software Engineering (ICSE’17), Buenos Aires, Argentina, May 20-28, 2017 (17% acceptance rate).</li><li>[2] Armaly, A., <b>Rodeghero, P.</b>, McMillan, C., “A Comparison of Program Comprehension Strategies by Blind and Sighted Programmers”, in Transactions on Software Engineering (TSE), accepted July 5, 2017. Journal First.</li><li>[3] <b>Rodeghero, P.</b>, “Behavior-Informed Algorithms for Automatic Documentation Generation”, in the Proc. of the 33rd IEEE International Conference on Software Maintenance and Evolution (ICSME).</li><li>[4] <b>Rodeghero, P.</b>, McMillan, C., Shirley, A. “API Usage in Descriptions of Source Code Functionality”, The International Workshop on API Usage and Evolution. Co-located with ICSE’17.</li><li>[5] <b>Rodeghero, P.</b>, Huo, D., Ding, T., McMillan, C., Gethers, M., “An Empirical Study on How Expert Knowledge Affects Bug Reports”, Journal of Software: Evolution and Process. <b>Special issue containing the best papers</b> from the 30th International Conference on Software Maintenance and Evolution. Extensive revision and expansion of the conference paper.</li><li>[6] <b>Rodeghero, P.</b>, “Discovering Important Source Code Terms.” The Proceedings 38th IEEE/ACM International Conference on Software Engineering (ICSE’16). ACM Student Research Competition, Austin, Texas, USA.</li></ul>	

	<p>[7] <b>Rodeghero, P.</b>, McMillan, C., “An Empirical Study on the Patterns of Eye Movement during Summarization Tasks”, in Proc. of the 9th International Symposium on Empirical Software Engineering and Measurement (ESEM’15), Beijing, China, Oct. 22-23, 2015, 10 pages.</p> <p>[8] <b>Rodeghero, P.</b>, Liu, C., McBurney, P. W., McMillan, C., “An Eye-Tracking Study of Java Programmers and Application to Source Code Summarization”, in IEEE Transactions on Software Engineering (TSE).</p> <p>[9] <b>Rodeghero, P.</b>, McMillan, C., McBurney, P. W., Bosch, N., D’Mello, S., “Improving Automated Source Code Summarization via an Eye-Tracking Study of Programmers”, in Proc. of 36th IEEE/ACM International Conference on Software Engineering (ICSE’14), Hyderabad, India, May 31-June 7 2014, 12 pages. (20% acceptance rate)  <b>ACM Distinguished Paper Award</b></p>
PUBLICATIONS UNDER REVIEW	<p>[10] <b>Rodeghero, P.</b>, Wood, A., Armaly, A., McMillan, C., and Krasniqi, R. [The name of the paper has been redacted to comply with the double-blind review process], in review for the 40th International Conference on Software Engineering (ICSE’18).</p> <p>[11] Armaly, A., <b>Rodeghero, P.</b>, and McMillan, C., [The name of the paper has been redacted to comply with the double-blind review process], in review for the 40th International Conference on Software Engineering (ICSE’18).</p> <p>[12] <b>Rodeghero, P.</b>, McMillan, C., “Detecting Important Terms in Source Code”, in review at the IEEE Transactions on Software Engineering</p>
CONFERENCE TALKS	<p>[1] “Detecting User Story Information in Developer-Client Conversations to Generate Extractive Summaries”, The 39th ACM/IEEE International Conference on Software Engineering (ICSE’17), Buenos Aires, Argentina, May 20-28, 2017 (17% acceptance rate).</p> <p>[2] “Behavior-Informed Algorithms for Automatic Documentation Generation”, The 33rd IEEE International Conference on Software Maintenance and Evolution (ICSME).</p> <p>[3] “API Usage in Descriptions of Source Code Functionality”, The International Workshop on API Usage and Evolution.</p> <p>[4] “An Empirical Study on the Patterns of Eye Movement during Summarization Tasks”, The 9th International Symposium on Empirical Software Engineering and Measurement (ESEM’15), Beijing, China, Oct. 22-23, 2015.</p> <p>[5] “Improving Automated Source Code Summarization via an Eye-Tracking Study of Programmers”, The 36th IEEE/ACM International Conference on Software Engineering (ICSE’14), Hyderabad, India, May 31-June 7 2014. (20% acceptance rate)  <b>ACM Distinguished Paper Award</b></p>
CONFERENCE POSTERS	<p>[1] <b>Rodeghero, P.</b>, “Discovering Important Source Code Terms.” The Proceedings 38th IEEE/ACM International Conference on Software Engineering (ICSE’16). ACM Student Research Competition, Austin, Texas, USA.</p> <p>[2] <b>Rodeghero, P.</b>, “Behavior-Informed Algorithms for Automatic Documentation Generation”, in the Proc. of the 33rd IEEE International Conference on Software Maintenance and Evolution (ICSME).</p>
INVITED TALKS	<p>[1] “Behavior-Informed Algorithms for Automatic Documentation Generation”. In: <i>Hope College Seminar</i>, October 19, 2017</p>

## AWARDS AND HONORS

- [1] National Science Foundation Travel Award to attend ICSE 2016 \$652
- [2] SIGSOFT CAPS Travel Award to ICSE 2015 \$1200
- [3] National Science Foundation Travel Award to attend NasBase 2015 \$660
- [4] ACM Distinguished Paper Award ICSE 2016
- [5] CSE GAANN Teaching Fellow \$30,000 per year for 4 years
- [6] Department of Computer Science and Engineering Kaneb Outstanding Graduate Student Teacher Award 2013 \$100
- [7] Notre Dame Outstanding Graduate Student Teaching Award 2013 \$100
- [8] Funding provided by CRA to attend CRA Grad Cohort 2014 \$756.12

## ADVISING AND MENTORING

### Undergraduate Students

- **Abigail Shirey**, Computer Science Engineering, January 2017-Present  
Work resulted in the paper: “API Usage in Descriptions of Source Code Functionality” at The International Workshop on API Usage and Evolution. Co-located with ICSE’17

## TEACHING EXPERIENCE

### University of Notre Dame, Notre Dame, Indiana

CS 40877 Educational Game Design 2017

- **Instructor of Record**
- New course - designed curriculum
- 12 senior level computer science/engineering students
- Collaborated with a local school to build educational games for classroom use.

CS 40773 Software Projects With Drones 2016

- Guest lecturer for two classes on software engineering topics

CS 40497 Information Web Sciences 2014

- Teaching Assistant
- Provided daily support in the classroom. Held office hours.
- Graded student work.

CS 40424 Human Computer Interaction 2013

- Teaching Assistant (*Received two awards: The Department of Computer Science and Engineering Kaneb Outstanding Graduate Student Teacher Award & The Notre Dame Outstanding Graduate Student Teaching Award 2013*)
- Guest lectured on building software prototypes and wireframes.
- Provided daily support in the classroom. Held office hours.
- Graded student work.

### Ball State University, Muncie, Indiana

Introduction to Computer Science 2013

- Lab Instructor
- Conducted regularly lab meetings and instructed students on assigned tasks.

PROFESSIONAL  
SERVICE

**Committee Service**

- Program Committee *IEEE/ACM International Conference on Program Comprehension* (2018)
- Program Committee *Mining Software Repositories Program Competition Track* (2018)
- Organizing Committee, Publicity Chair and Social Media Chair for *IEEE Source Code Analysis and Metrics* (2018)
- Program Committee *IEEE International Conference on Software Maintenance and Evolution New Ideas and Emerging Results Track* (2017)
- Organizing Committee, Web Chair for *IEEE Source Code Analysis and Metrics* (2017)

**Referee Service**

- Journal Reviewer for *Journal of Systems and Software* (2017)
- Organizing Committee, Student Volunteer for *IEEE International Conference on Software Maintenance and Evolution* (2016)
- Subreviewer for *IEEE International Conference on Software Analysis, Evolution, and Reengineering Early Research Achievements Track* (2016)
- Reviewer for *IEEE Transactions on Education* (2015)
- Subreviewer for *IEEE International Conference on Program Comprehension* (2015)

RESEARCH AND  
PROFESSIONAL  
EXPERIENCE

**University of Notre Dame**, Notre Dame, Indiana

*Research Assistant*

**June 2013 - Present**

- Adviser: Collin McMillan
- Worked with a team of researchers on 15 separate projects
- Lead 12 separate projects within the research team

**ABB Corporate Research Center**, Raleigh, North Carolina

*Research Internship*

**April 2016 - July 2016**

- Adviser: David Shepherd
- Collaborated with a team of researchers from ABB Corporate Research and from the University of Zurich to design and develop a communication retrospection dashboard for the FlowLight.
- Ran pilot studies with ABB employees.
- Installed FlowLights and software in the Buenos Aires, Argentina ABB location.

**Alden Systems, Inc.**, Birmingham, Alabama

*Software Engineering Internship*

**February 2016 - March 2016**

- Designed and implemented a reporting system on current project progress. The system reported on open user stories, open tasks, and open bug reports.

**University of Alabama**, Tuscaloosa, Alabama

*Research Experiences for Undergraduates (REU)*

**June 2012 - July 2012**

- Adviser: Nicholas Kraft
- Pair programmed, designed and partially implemented a tool for detecting code clones within large software projects.

**IDEE/Vizi Courseware, LLC**, Muncie, Indiana

*Software Developer*

**May 2010 - May 2013**

- Designed and developed educational games for collegiate level courses to replace traditional textbooks.

**Ball State University**, Muncie, Indiana

*Software Developer*

**August 2012 - May 2013**

- Designed and developed two educational computer games for the Indiana State Museum with 11 team members.

PROFESSIONAL  
MEMBERSHIPS

- Society of Women Engineers (2013 - Present)
- IEEE (2014 - Present)
- ACM (2013 - Present)
- SigSoft (2014 - Present)

REFERENCES  
AVAILABLE TO  
CONTACT

On Request

OTHER

U.S. Citizen, SWE-ND (Committee Member 2014-2015), Algebra II Tutor, Geometry Tutor, Research Tutor, ACM Student Member, SIGSOFT Member, ND Dance Company Member

MORE  
INFORMATION

More information and auxiliary documents can be found at  
<http://paigerodeghero.com/>