

Priscila Santiesteban

Computer Science and Engineering • University of Michigan

2909 Bob and Betty Beyster Building, 2260 Hayward Street, Ann Arbor MI, 48105

✉ pasanti@umich.edu | 🏠 <https://pasantiesteban.github.io/> | 🐙 pasantiesteban | 🌐 priscila.santiesteban

Education

University of Michigan

PH.D IN COMPUTER SCIENCE ENGINEERING

Aug. 2021 - May 2026

(Expected Graduation)

- Adviser: Westley Weimer
- Research Interests: *Software Engineering, Automatic Program Repair, Human Cognition*

Coe College

Aug. 2017 - May 2021

B.A. IN COMPUTER SCIENCE AND PHYSICS WITH MATHEMATICS MINOR

- Computer Science with Honors (summa cum laude), Liberal Arts College, GPA 3.98
- Physics with Honors (summa cum laude), Liberal Arts College, GPA 3.86
- Mathematics Minor, Liberal Arts College

Publications

PUBLISHED FULL CONFERENCE PAPERS [PEER-REVIEWED]:

[C2] CirFix: Automated Hardware Repair and its Real-World Applications

TSE 2023

SANTIESTEBAN, P., HUANG, YU., WEIMER, W., AHMAD, H.

- To Appear in volume 50 of IEEE Transactions of Software Engineering.
- 80% acceptance rate

[C1] VarFix: balancing edit expressiveness and search effectiveness in automated program repair

ESEC/FSE 2021

WONG, C., SANTIESTEBAN, P., KÄSTNER, C., LE GOUES, C.

- To Appear at the proceedings of the 29th ACM Joint Meeting on European Software Engineering Conference and Symposium on the Foundations of Software Engineering
- 39% acceptance rate

PUBLISHED WORKSHOP PAPERS [PEER-REVIEWED]

[W1] An Analysis of Sex Differences in Computing Teaching Evaluations

GE@ICSE 2022

SANTIESTEBAN, P., ENDRES, M., WEIMER, W.

- 3rd Workshop on Gender Equality, Diversity, and Inclusion in Software Engineering (GE)

WORKS UNDER REVIEW [PEER-REVIEWED]:

N/A

FULL CONFERENCE AND JOURNAL PAPERS IN PREPARATION:

N/A

WORKSHOP PAPERS IN PREPARATION:

N/A

Fellowships

\$147,000	National Science Foundation Graduate Research Fellowship	<i>Awarded - 2023</i>
\$91,200	Rackham Merit Fellowship (University of Michigan)	<i>Awarded - 2021</i>

Funding and Grants

Total Awarded (for which I wrote the proposal): **\$17,970**

Grants Awarded:

\$17,970 - "Understanding the Relationship Between Spatial Reasoning and Programming Using TMS and MRI"

Work and Relevant Experience

RESEARCH AND DEVELOPMENT

University of Michigan

Ann Arbor, MI

GRADUATE RESEARCH ASSISTANT

Aug. 2021 - Present

- Supervised by Professor Westley Weimer
- Conducted a qualitative empirical human study of novice programmers
- Conducted a statistical analysis of an automatic repair tool as debugging aid for pedagogy
- Investigated the relationship between sex biases in professor teaching evaluations via statistical methods
- Interdisciplinary collaborations with researchers in Michigan's Department of Psychology

Carnegie Mellon University

Pittsburgh, Pennsylvania

UNDERGRADUATE RESEARCH INTERN

June. 2020 - Aug. 2020

- Supervised by Professor Christian Kastner and Clarie Le Goues
- Worked remotely due to the COVID-19 pandemic
- Analyzed patch quality in automatic program bug repair under an open-ended directive
- Developed a deterministic algorithm that quantified patch characteristics under a ranking metric
- Published work (FSE 2021) as part of a systematic overview of VariFix

Cornell University

Ithaca, New York

UNDERGRADUATE RESEARCH INTERN

June 2019 - Aug. 2019

- Computationally examined the link between anomalous mechanical and thermal properties in crystals
- Exposure to Density-functional theory (DFT) to examine the structure and chemistry of materials
- Presented findings at a poster session and gave a talk at 2019 NNCI REU Convocation at Cornell University

INFORMATION TECHNOLOGY

LimoLink

Cedar Rapids, Iowa

SOFTWARE ENGINEERING INTERN

Sept. 2018 - Feb. 2019

- Object Oriented programming with c#.net and c#.Web
- Usage of Bitbucket and SourceTree to monitor source code modifications and upload updated source code
- Collaborated with a co-worker debugging company prototype web designs
- Tested source code with TestComplete in Javascript and managed results via QAcomplete

MANAGEMENT AND CONSULTING

Coe College

Cedar Rapids, Iowa

ASSISTANT AREA COORDINATOR

Aug. 2020 - May 2021

- Assistant area coordinator of in all female dormitory (180 students)
- Managed and guided 6 resident hall assistants in conducting everyday duties
- Advised resident assistants in conflicts between residents
- Facilitated team meetings to address area-wide concerns and announcements
- Supervised resident assistant administrative duties such as incident reports and duty reports

Coe College

Cedar Rapids, Iowa

RESIDENT HALL ASSISTANT

Aug. 2018 - May 2020

- Provided guidance and assistance to incoming freshmen in adapting to college life during my first year
- During my second year, I provided leadership and assistance to second and third year students
- Developed activities and projects to engage students in their communities and with their peers.
- Engaged in administrative duties such as check-outs, move-ins/move-outs, incident reports, and duty reports on a timely and efficient manner

Teaching and Mentorship Experience

TEACHING ASSISTANT, COE COLLEGE

Computer Science I, CS 125

Spring 2019

Select Video Coverage

- [Remote presentation at GE@ICSE 2022 on workshop publication - An Analysis of Sex Differences in Computing Teaching Evaluations](#)
- [Presentation at NNCI REU 2019 Convocation on undergraduate research at Cornell University](#)

Honors and Awards

SCHOLARSHIPS

Clark Merit Scholarship (Coe College)

Term 2020 - 2021

- Award recipients are chosen based on demonstrated qualities of character, integrity, intellect, leadership and social responsibility at Coe College
- Clark Merit Scholars are chosen each year by a committee of two faculty members and one board of trustees member
- Award carries a prize equal to one year's tuition.

HONORS

Phi Kappa Beta (Coe College)

Spring 2021

- Aims to promote and advocate excellence in the liberal arts and sciences, and to induct the most outstanding students of arts and sciences at American colleges and universities

Alpha Lambda Delta (Coe College)

Fall 2018

- National honor society for First-Year college students whose GPA exceeds a 3.5

AWARDS AND PRIZES

Richard C. and Jennifer H. Prize (Coe College)

May 2021

- Presented to a student who shows high level of competence and academic achievement in the area of mathematics or computer science (annually)

Arthur Wright Erskine Physics Prize (Coe College)

May 2018

- Presented to a student who shows high level of competence and academic achievement in the area of physics (annually)

Technical Skills

Programming

Python, C/C++, SQL

Research

Quantitative and Qualitative analysis, Data Science, Human Study Experimental Design

Empirical Evaluations

50,000+ Lines of Code, 10 remote participants

Other

Native Spanish Speaker

Reference: Westley Weimer, University of Michigan (weimerw@umich.edu)

Additional references available upon request