Jennifer Parham-Mocello Curriculum Vita

2101 Kelley Engineering
School of EECS, Oregon State University
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Education and Employment Information

Education

2009	Ph.D., Computer Science Clemson University Advisor: Dennis E. Stevenson
2003	M.S., Computer Science The University of Montana Advisor: Don Morton
1999	B.S., Computer Science Appalachian State University

Professional Experience

Sept. 2018–present	Assistant Professor School of Electrical Engineering and Computer Science Oregon State University
Sept. 2017-Sept. 2018	Senior Instructor School of Electrical Engineering and Computer Science Oregon State University
Sept. 2011-Sept. 2017	Instructor School of Electrical Engineering and Computer Science Oregon State University
June 2011-Aug. 2011	Instructor ITT Technical Institute
February - June 2011	Postdoctoral Researcher Engineering and Science Education Clemson University
July 1999 - Aug 2000	Web Developer VailSoft Inc.
July 1999 - Aug 2000	Adjunct Instructor Colorado Mountain College
May 1996 - Dec 1996	Internship Cabletron Systems, Inc.

Scholarship and Creative Activity

Publications

Peer-Reviewed Archival Publications

1. **Azzouni, Abdullah** and Parham-Mocello, J. (2021). Evaluating Current Continuous Improvement Approaches in an ABET-Accredited Computing Program (ITiCSE 2021). (~30% acceptance rate) (advisor, minor contributor, co-wrote the paper)
2. Niess, Margaret, Parham-Mocello, J. and Erwig, M. (2021). Reframing Middle School Mathematics Teachers' TPACK for Teaching A New Computer Science Curriculum: Researcher-Practitioner Partnership, Board Games, and Virtual Teaching Experiences. Proceedings of Society for Information Technology & Teacher Education International Conference. (minor contributor, co-wrote the paper)
3. **Moissinac, B**., Parham-Mocello, J., and Pappas, R. (2020 March). CS Student Laptop and Computer Lab Usage as a Factor of Success in Computing Education. Special Interest Group in Computer Science Education (SIGCSE 2020). (~30% acceptance rate) (advisor, major contributor, co-wrote the paper)
4. Parham-Mocello, J. and Erwig, M. (2020 March). Does Story Programming Prepare for Coding? Special Interest Group in Computer Science Education (SIGCSE 2020). (~30% acceptance rate) (key contributor, co-analyzed data, co-wrote the paper)
5. **Bodle, E.** and Parham-Mocello, J. (2020 June). The Effectiveness of Using Robotics in Middle School Career Technology Education. American Society for Engineering Education (ASEE 2020). (advisor, major contributor, co-wrote the paper)
6. McCormick, M., Parham-Mocello, J., Heer, D. (2020 October). Improving Multidisciplinary Understanding Through Interdisciplinary Project-based Learning in a First-Year Orientation Course. Frontiers in Education (FIE 2020), Uppsala, Sweden. (minor contributor, co-wrote the paper)
7. Parham-Mocello, J., Erwig, M., and Dominguez, E. To Code or Not to Code? Programming in Introductory CS Courses (VL/HCC 2019). (~40% acceptance rate) (key contributor, co-analyzed data, co-wrote the paper)
8. Parham-Mocello, J., **Ernst, S.,** Erwig, M., Shellhammer, L., and Dominguez, E. 2019. Story Programming: Explaining Computer Science Before Coding. Special Interest Group in Computer Science Education (SIGCSE 2019). (~30% acceptance rate) (key contributor, co-analyzed data, co-wrote the paper)
9. **Ernst, S.** and Parham-Mocello, J. Crafting Design Documents in First-Year CS Courses. Psychology of Programming Interest Group (PPIG 2018). (advisor, major contributor, co-wrote the paper)
10. Parham-Mocello, J. and **Ernst, S.** (2017 October). Analysis of Freshman Designs and the Correlation to Grades. The Journal of Computing Sciences in Colleges, 33(1), 186-193. (key contributor, co-analyzed data, co-wrote the paper)
11. Parham, J., Gugerty, L., and Stevenson, D. E. 2010. Empirical Evidence for the Existence and Uses of Metacognition in Computer Science Problem Solving. SIGCSE (March 2010), 1-5. (key contributor, co-analyzed data, co-wrote the paper)
12. Parham, J., Chinn, D., and Stevenson, D. E. 2009. Using Bloom's taxonomy to code verbal protocols of students solving a data structure problem. In Proceedings of the 47th Annual Southeast Regional Conference (March 2009), 1-6. (key contributor, co-analyzed data, co-wrote the paper)

13. Stevenson, D. E. and Parham, Jennifer. (2006). Problem-Based and Case-Based Methods in Computer Science. The Creative College Teaching Journal, 3(1), 53–66. (minor contributor, co-wrote the paper)
14. D. Morton, J. Parham. (2004 April). Engaging Students in Computational Sciences. Paper presented at the 3rd annual Graduate Student and Faculty Conference in the College of Arts and Sciences (CAS), The University of Montana, Missoula, MT. (minor contributor, co-wrote the paper)
15. Parham, J. (2003 December). An Assessment and Evaluation of Computer Science Education. The Journal of Computing Sciences in Colleges, 19(2), 115-127. (sole contributor)
16. J. Parham, D. Morton. (2003 March). Scientific Computing in Climate Modeling. Paper presented at the Association of American Geographers 2003 Annual Meeting, New Orleans, LA. (major contributor, co-wrote the paper)
17. D. Morton, G. Robinson, J. Shuckra, J. Parham (presenter), T. Warburton. (2002 September). Building and Maintaining Critical Mass for Research Programs in the Frontier Regions. Paper presented at American Association for the Advancement of Science 53rd Arctic Science Conference, Fairbanks, AK. (minor contributor, co-wrote the paper)

Papers Currently under Peer Review

1. **Azzouni, Abdullah** and Parham-Mocello, J. (2021). Continuous Improvement in Academic Computing Programs is Rarely Comprehensive. American Society for Engineering Education (ASEE 2021). (advisor, major contributor, co-wrote the paper)
2. **Almadhoun, E.** and Parham-Mocello, J. (2021). Exploratory Study on Accuracy of Students' Mental Models of a Singly Linked List. Frontiers in Education (FIE 2021). (advisor, major contributor, co-wrote the paper)
3. **Azzouni, Abdullah** and Parham-Mocello, J. (2021). A Method for Evaluating a Computing Program's Continuous Improvement Plan. Frontiers in Education (FIE 2021). (advisor, major contributor, co-wrote the paper)

Professional Meetings, Symposia, and Conferences

Presentations to Professional Groups

1. Niess, Margaret, Parham-Mocello, J. and Erwig, M. (2021). Reframing Middle School Mathematics Teachers' TPACK for Teaching A New Computer Science Curriculum: Researcher-Practitioner Partnership, Board Games, and Virtual Teaching Experiences. Proceedings of Society for Information Technology & Teacher Education International Conference.
2. Elliott, R., Parham-Mocello, J. & Lockwood, E. 2021. Design Principles for Supporting Computational Thinking in Mathematics Teacher Education Modules. AERA 2021 annual meeting round table.
3. Elliott, R., Lockwood, E., Parham-Mocello, J. 2021. Conceptualizing Opportunities for Computational Thinking Practices to Solve Mathematics Tasks in Mathematics Methods Courses. AMTE 2021.
4. Stevenson, C., Cohan, A., Barth, J., Santo, R., Bachrach, M., Parham-Mocello, J., 2020. Real Research: Research-Based Solutions to Big CS Challenges. CSTA CS-ER Panel.
5. Ellis, M., Freeman, K., Parham-Mocello, J. and Walker, H. (2020 March). Supporting Student Co-Curricular Experiences. SIGCSE 2020 Panel session.
6. **Moissinac, B**., Parham-Mocello, J., and Pappas, R. (2020 March). CS Student Laptop and Computer Lab Usage as a Factor of Success in Computing Education. Special Interest Group in Computer Science Education (SIGCSE 2020).

7. Parham-Mocello, J. and Erwig, M. (2020 March). Does Story Programming Prepare for Coding? Special Interest Group in Computer Science Education (SIGCSE 2020).
8. **Bodle, E.** and Parham-Mocello, J. (2020 June). The Effectiveness of Using Robotics in Middle School Career Technology Education. American Society for Engineering Education (ASEE 2020).
9. Parham-Mocello, J., Erwig, M., and Dominguez, E. To Code or Not to Code? Programming in Introductory CS Courses (VL/HCC 2019).
10. Parham-Mocello, J., **Ernst, S.,** Erwig, M., Shellhammer, L., and Dominguez, E. 2019. Story Programming: Explaining Computer Science Before Coding. Special Interest Group in Computer Science Education (SIGCSE 2019).
11. Freeman, K., Parham-Mocello, J. and Walker, H. (2019 March). CS Undergraduate Co-curricular Activities. SIGCSE 2019 Birds of a Feather session.
12. Parham-Mocello, J. (2019 February). CozmOSU. Learning Innovation Grant Poster Session.
13. **Ernst, S.** and Parham-Mocello, J. Crafting Design Documents in First-Year CS Courses. Psychology of Programming Interest Group (PPIG 2018).
14. Parham-Mocello, J. and **Ernst, S.** (2018 June). Peer-Led, Peer to Peer Recitations. OSU Action Research Fellowship Poster Session.
15. **Ernst, S.** and Parham-Mocello, J. (2018 March). Analysis of the Differences in Designs between CS 1 and CS 2 Students. Special Interest Group in Computer Science Education (SIGCSE 2018).
16. Parham-Mocello, J. and **Ernst, S.** (2017 June). Peer-Led, Peer to Peer Recitations. OSU Action Research Fellowship Poster Session.
17. Parham-Mocello, J. (2014 October) Featured Assignments and Labs in the Engage CSEdu project. Google and NCWIT.
18. Link, D., Billman, D., Gugerty, L., and Parham-Mocello, J. (2012 March) Effects of domain knowledge in searching for internet health information. 2012 Symposium on Human Factors and Ergonomics in Health Care: Bridging the Gap. (poster accepted).
19. J. Parham. (2004 May). Bringing the Access Grid to Clemson. Presentation given to the weekly College of Engineering and Science department chairpersons, Clemson University, Clemson, SC.
20. J. Parham, D. Morton. (2003 September). Montana Rockies Center for Computational Science. Poster presented at DOE-EPSCoR Site Visit, Bozeman, MT.
21. J. Shuckra, D. Morton, J. Parham, G. Robinson. (2002 November). Pioneering Distance Education over AccessGrid. Poster presented at SC 2002, Baltimore, MD.
22. D. Morton, J. Parham, J. Sauer. (2002 June). Montana Rockies Center for Computational Science. Poster presented at DOE-EPSCoR Workshop at Pacific Northwest National Laboratory, Richland, WA.
23. R. Edberg, G. Robinson, J. Parham, D. Morton, J. Shuckra, T. Warburton, F. Gilfeather, (2002 March). Collaborative High Performance Computing Course Using The Access Grid. Paper presented at Access Grid Retreat 2002, San Diego, CA.
24. R. Edberg, F. Williams, F. Gilfeather, G. Robinson, D. Morton, J. Parham, T. Warburton, B. Smith, J. Shuckra. (2001 November). Collaborative Course in Parallel Scientific Computing. Panel discussion at SC Global 2001, Denver, CO.

Participation at Invitational Workshops

- NSF CUE.NEXT Workshop, Denver, CO, February 2020.
- National Effective Teaching Institute (NETI-2) Workshop, Salt Lake City, UT, June 2018.

Grant and Contract Support

List covers grants/contracts on which candidate served as PI or coPI only, including those funded through other institutions. "My share" indicates the amount of funding, if any, over which I had control.

Agency & Dates	*PI (and coPIs)*	*Title*	*Total Budget*	*My Share*
Lemelson Foundation 7/20-7/22	J. Parham-Mocello, M. Wengrove, T. Weller, R. Cate	Computational EOP Degree	$30,000	$15,000
NSF 9/19-8/22	J. Parham-Mocello, M. Erwig, M. Niess	Child's Play: Learning CS Through Tabletop Games	$1,000,000	$686,580
Google, Inc. 7/19-6/20	J. Parham-Mocello, R. Elliott, E. Lockwood	Integrating CS into Math Secondary Education	$141,800	$63,729
Scaled LIG, OSU 7/18-6/19	Nemhard, D., MacCarty, N., and Parham-Mocello, J.	Technology and Creativity for First Term Engineering Student Retention	$95, 000	$10,000
Individual LIG, OSU 4/18-3/19	Parham-Mocello, J.	Cozmos for Programming	$9,950	$9,950
OSU ESTEME 2017	Parham-Mocello, J.	Peer-Led, Peer-to-Peer Recitations	$3,000	$3,000
EECS. 2017 Research Internship for Undergraduates Initiative	Erwig, M. and Parham-Mocello, J.	Story Programming	$14,100	
NCWIT Seed Award 2016	Parham-Mocello, J.	OSU ACM-W Chapter	$3,000	$3,000
OSU ESTEME 2016	Parham-Mocello, J.	Peer-Led, Peer-to-Peer Recitations	$3,000	$3,000
2016 Google IgniteCS	Parham-Mocello, J and Mini, C.	Computational Thinking Seminar and Dinner Series	$9,975	$9,975
2015 Google CS Engagement	Parham-Mocello, J	First-Year CS Engagement	$5,000	$5,000
		Totals	$1,284,825	$809,234

Proposals Currently under Review

Agency	*PI (and coPIs)*	*Title*	*Budget*	*Duration*
National Science Foundation	Yeongjin Jang, Rakesh Bobba, Alan Fern, Jennifer Parham-Mocello	EAGER: SaTC AI-Cybersecurity: Competition-based Research and Education Platform for Cybersecurity in the age of AI	Letter of Intent	2021-2024
National	Jennifer Parham-	CSforAll: Research Strand:	$500,000	2021-

Science Foundation	Mocello and Martin Erwig	Guided Gradual Programming		2024
Google	Jennifer Parham-Mocello, Martin Erwig, and Margaret Niess	Child's Play Extended	**$102, 002**	2021-2022

Teaching, Advising, and Other Assignments

Instructional Summary

Credit Courses

Number	Course Title	Term/Year	Credits	Enrollment
CS160	CS Orientation	Fall 2018	3	125
CS160H	Honors CS Orientation	Fall 2018	3	31
CS161	Intro. to CS I (section 1)	Winter 2019	4	189
CS161	Intro. to CS I (section 2)	Winter 2019	4	251
CS160	CS Orientation Experienced	Fall 2019	3	66
CS160	CS Orientation Intermediate	Fall 2019	3	131
CS160H	Honors CS Orientation	Fall 2019	3	20
CS160	CS Orientation w/o Experience	Fall 2020	3	150
CS160	CS Orientation w/ Experience	Fall 2020	3	150
CS160H	Honors CS Orientation	Fall 2020	3	18
Prior to Tenure Track				
CS 161	Intro to Computer Science I	Fall 2011	4	57
CS 275	Introduction to Databases	Fall 2011	4	74
CS 440	Database Management Systems	Winter 2012	4	45
CS 480	Translators	Winter 2012	4	83
ECE 151	Programming I/Embed Control Lab	Spring2012	4	117
CS 275	Introduction to Databases	Spring 2012	4	85
ENGR 407	MECOP/Computer Science	Fall 2012	1	53
CS160	Computer Science Orientation	Fall 2012	4	169
CS 161	Intro to Computer Science I	Fall 2012	4	93
CS 161	Intro to Computer Science I (divided into 2 sections)	Winter 2013	4	241
CS 480	Translators	Winter 2013	4	49
CS 161	Intro to Computer Science I	Spring 2013	4	160
CS 162	Intro to Computer Science II	Spring 2013	4	171
ENGR 407	MECOP/Computer Science	Fall 2013	1	44
CS160	Computer Science Orientation	Fall 2013	4	245
EECS 161	Introduction to Programming I	Fall 2013	4	97
EECS 161	Introduction to Programming I	Winter 2014	4	296
CS 480	Translators	Winter 2014	4	61
EECS 162	Introduction to Programming II (divided into 2 sections)	Spring 2014	4	195
CS 391	Ethical Issues in Computer Science	Summer 2014	3	8
ENGR 407	MECOP/Computer Science	Fall 2014	1	51
CS160	Computer Science Orientation	Fall 2014	4	232

CS 161	Intro to Computer Science I	Fall 2014	4	143
CS 161	Intro to Computer Science I	Winter 2015	4	341
CS 480	Translators	Winter 2015	4	103
CS 162	Intro to Computer Science II	Spring 2015	4	239
CS160	Computer Science Orientation	Fall 2015	4	269
CS 161	Intro to Computer Science I	Fall 2015	4	135
CS 161	Intro to Computer Science I	Winter 2016	4	396
CS 162	Intro to Computer Science II	Spring 2016	4	299
CS 160	Computer Science Orientation	Fall 2016	3	276
CS 160H	Honors CS Orientation (new class created)	Fall 2016	3	19
CS 161	Intro to Computer Science I	Fall 2016	4	120
CS 161	Intro to Computer Science I	Winter 2017	4	391
CS 162	Intro to Computer Science II	Spring 2017	4	259
CS 160	Computer Science Orientation (divided into 3 sections)	Fall 2017	3	311
CS 160H	Honors CS Orientation	Fall 2017	3	20
CS 161	Intro to Computer Science I	Fall 2017	4	126
CS 161	Intro to Computer Science I	Winter 2018	4	425
CS 162	Intro to Computer Science II	Spring 2018	4	274

Non-Credit Courses and Workshops

Winter 2020

- Google Computational Intervention for Math Secondary Education Teachers
  Developed and delivered computational curriculum for 2 weeks in SED 576 and MTH 492/592 designed to teach secondary math education majors how to think computationally and write computer programs.
  - SED 576
    - Three, 2-hour classes
  - MTH 492/592
    - Four 1.5-hour classes

Summer 2017

- Camp Fortran for NuScale Power
  Created a Fortran workshop for NuScale Power in Corvallis, OR. This was a 5-day, 4 hours per day workshop to teach mechanical, electrical, and nuclear engineers how to program in Fortran.

Spring 2016

- Computational Thinking Seminar and Dinner Series
  Hosted five 3-hour workshops for women in high-school and non-CS majors at OSU to teach how to think computationally using unplugged activities, such as writing an algorithm for putting on your lipstick/Chapstick.

Course and Curriculum Development

On-Campus

- *Engineering+ (Fall 2018 – Ongoing)*
  Serve as part of the team to create a new first-year experience for the college of engineering that includes a new sequence of first-year courses (ENGR 100, 102, and 103), a living learning community, and co-curricular events (Engineering Fridays).

- *ENGR 103 (Spring 2021)*
  Creating a computational Engineering for One Planet section of the ENGR 103 computation course in the new Engineering+ first-year courses.

- *CS 160H (Fall 2016)*
  Created an honors section of CS 160 with 20 students. This class has its own dedicated lab and lecture for the students, and I instruct the labs, rather than having TAs run the lab as done in the traditional CS 160 course with the help of a TA who was a prior CS 160 honors student.
- *CS 160 (Fall 2017 – Fall 2020)*
  Created smaller sections to CS 160 with different themes for teaching the course and for different experience levels. Over 5 years, the course grew from 169 to 295 and the Drop, Withdraw, and Failure (DWF) rate rose from about 5% to 20%. I was unsure if this increase in DWFs was due to the increased amount of programming added to the course over the years or if it was due to the population increase. Therefore, the course was divided into 3 100-person sections with one section taught using the same curriculum from Fall 2016, and the other two sections would differ in approach to investigate if the size of the class or approach contributed to the high DWF in 2016. However, I could not teach 5 courses in the Fall 2017, so we had a GTA teach the 3 sections of CS 160 under my supervision. This change led to incorporating GTAs into teaching the intro-level courses.
- *CS 160 (Fall 2012- 2016)*
  Incorporated more and more programming with a design and testing emphasis, and the evaluations increased with this approach, rather than the broad CS overview, curriculum planning, and guest speaker approach in the past. This can be observed in the student teaching evaluations for the course over the past 4 years: Q1, Q2 - 4.5/4.6 in 2012, 4.7/5.0 in 2013, 5.2/5.2 in 2014, and 5.3/5.4 in 2015, and 4.8/5.1 in 2016. However, in Fall 2016, evaluations began lowering and DWF increased. More undergraduate TA interactions were added to the class, and all assignments had to be explained in person to a TA for a grade, which helped students meet peers and facilitated stronger learning. In 2015, I also added an optional recitation to the course as a pilot, and this proved to not be advantageous to the cs orientation class
- *CS 161/162 (Fall 2013 – Ongoing)*
  Created proficiency demonstrations for the class and new peer-led recitations, which were unable to be continued due to the increasing enrollment. In addition, the way assignments are graded was changed to live coding demonstrations with the TAs for a grade. This provides interaction with the TAs and minimizes cheating because students must be able to explain their solution/code.

  From the beginning of teaching CS 161 and 162, problem-based learning was incorporated into the curriculum with weekly group exercises and a problem to solve and implement during class time to reinforce the topics learned during the week. As these classes continued to grow, I began to bring these engaging activities to the lab and outside the classroom with optional and required recitations. I have shifted the focus in these classes to be design, testing, and problem-solving based, rather than a programming and language specific. The students have always had to turn in a design and testing document with their program, but the challenge is in finding ways to ensure the students design and think about testing prior to programming.

Ecampus

In 2012, we started an online BS degree in computer science. I developed the initial online curriculum for CS 161 and CS 275 (now CS 340). I put together video lectures, assignments,

and weekly group quizzes for these courses. In 2014, I redesigned the CS 161 curriculum and video lectures to accommodate a new language, C++ instead of Java, for the course.

- *CS 161 - Introduction to Computer Science I (Spring 2014)*
  Re-designed the instructional material for the first online computer science class in C++, which included recording lectures and programming demonstrations using the engineering server environment. Design weekly interactive quizzes with demonstrations.
- *CS 161 - Introduction to Computer Science I (Spring 2012)*
  Designed the instructional material for the first online computer science class, which included recording lectures and programming demonstrations using Java and the Eclipse IDE. Design weekly interactive quizzes to keep online group participation and discussion at a maximum.
- *CS 275 - Introduction to Databases (Summer 2012)*
  Designed the instructional material for the introduction to databases class, which included recording lectures, database demonstrations, and web-application development using MySQL and PHP. Design weekly interactive quizzes to keep online group participation and discussion at a maximum.

Team or Collaborative Efforts

CS and Education (Fall 2019-Ongoing)
Work with CS and Education faculty to develop computational curriculum for 6th and 7th grade students and teachers at a local middle school in Corvallis, OR. This curriculum is designed to use board games as a way to explain the concept of algorithms and computation.

Math, Math Secondary Education, and CS Education (Winter 2020)
Worked with Secondary Education and Math faculty to develop new computational curricular material for undergraduate upper-level preservice teachers and graduate-level teacher candidates in the Mathematics and Secondary Education departments. We integrated this curricular material into MTH 492/592 and SED 576.

Interdisciplinary Robotics w/ MIME (Fall 2018)
Worked with the Mechanical, Industrial, and Manufacturing Engineering (MIME) faculty to combine MIME and CS students in the orientation labs and develop a new curriculum for working with the Lego Mindstorms, Cozmo robots, and 3-D printing in interdisciplinary teams.

Advising

Graduate Advisees – Completed

Student	Degree	Thesis	Graduated
1. Roger Song	MS	The Analysis of Peer Reviews among First-year Computer Science College Students	Fall 2020
2. Chris Kawell	MS	A Study on the Effect of Non-traditional Demographic Populations in an Undergraduate CS Course	Summer 2020
3. Fengfei Zheng	MS	The Analysis of Students' Self-efficacy and the Effectiveness of Peer Review in First-year CS Courses	Winter 2020
4. Ernie Bodle	MS	The Effectiveness of Using Robotics for Career Technology Education in a Middle School STE(A)M Course	Fall 2019

5. Beatrice Moissinac[1] (co-advised by Robin Pappas)	PhD	Computing Resource Usage as a Factor of Student Success	Fall 2019
6. Asma Alghamdi	MS	The Effectiveness of Using Robots in a Computer Science Orientation Class	Spring 2019
7. Shannon Ernst	MS	The Analysis of First Year Computer Science Design Documents	Fall 2018
8. Hanadi Alqahtani	MS	Creating a Game to Teach Pre-Readers Computational Thinking	Fall 2018
9. Ashwaq Alsalmi	MS	A Customizable Android Application to Make Learning Fun	Summer 2018

Graduate Advisees – Current

Student	Degree	Expected Graduation	Advanced to Candidacy (Y/N)
1. Eman Almadhoun	PhD	Spring 2021	Y
2. Abdullah Azzouni	PhD	Winter 2022	N
3. Paris Kalathas	PhD	Spring 2022	N
4. Pallavi Sapale	MS	Spring 2021	--
5. Aiden Nelson	MS	Fall 2021	--

Graduate Thesis or Project Committees

MEng Advisor:

Graduated

1.

Current

Minor Professor or Committee Member:

Graduated

1. Megan McCormick, MS, 2020
2. Chris Mendez's, MS, 2020
3. Claudia Hilderbrand, MS, 2019
4. Jiamin Shen, MEng, 2018
5. Spencer Kresge, MEng, 2018
6. Steven Hill, MS, Spring 2016
7. Wojtek Rajski, MS, Winter 2016

Current

1. Adaline DeChenne, PhD (Math Education)
2. Mariam Guizani, PhD (Computer Science)

Graduate Council Representative:

1. Raechel Soicher, PhD, 2020 (Psychology)
2. Stephanie Ramos, PhD, 2020 (Education)

[1]Beatrice was advised by Prasad Tadepalli prior to me. Beatrice completed her preliminary proposal defense and final defense with me as advisor.

3. Liam Cassidy, MS 2020 (Mechanical Engineering)
4. Nisha Raghunath, PhD, 2020 (Engineering Psychology)
5. Meredith Stone, PhD, 2019 (Education)
6. Zheng Li, PhD, 2019 (Psychology)
7. Anh Pham, PhD, 2018 (Electrical Engineering)
8. Shiwen Li, MS, 2018 (Electrical Engineering)
9. Hao Sun, MS, 2018 (Chemical Engineering)

Undergraduate Research Assistants

1. Javier Garcia (Fall 2020 – present)
2. Erick Branner (Fall 2020 – present)
3. Jessica Garcia (Winter 2019 – Spring 2020)
4. Kaitlin Hill (Fall 2018 – Spring 2020)
5. Aiden Nelson (Winter 2019 – Summer 2020)
6. Sharlena Lugyen (Summer 2018-Winter 2020)
7. Mason Sidebottom (Spring 2018- Fall 2019)
8. Hannah Vaughan (Spring 2018-Spring 2019)
9. Taz Thennell (Spring 2018)
10. Emily Dominguez (Fall 2017- Spring 2019)
11. Lily Shellhammer (Fall 2017-Spring 2019)
12. Liz Premer (Fall 2018-Winter 2019)
13. Miguel Gaspar (Spring 2018)
14. Ester Vega (Spring 2018)
15. Victor Campa (Fall 2017 – Spring 2018)
16. Louis Duvoisin (Fall 2017 – Spring 2018)
17. Jia Chen (Spring 2017)

Other Advising

Honors Thesis Committee Member

1. Abbie Glickman, Spring 2021
2. Quinn Handley, Winter 2020
3. Alannah Oleson, Spring 2018
4. Tatiana Thompson, Spring 2018
5. Kyle Thompson, Spring 2014
6. Ashley Schneider, Spring 2013
7. Daniel Urbanski, Summer 2012

Faculty Sponsor, Association for Computing Machinery-Women (Fall 2016-present)
We plan outreach events at the university and in the community, hold bi-weekly membership meetings, coordinate industry collaborations, raise money for Grace Hopper Scholarships, and recruit students at NCWIT regional awards.

Faculty Sponsor, K-12 CS Outreach Program (Fall 2018-present)
Sponsor and advisor for a group of 3-5 undergraduate students who develop K-12 computational curriculum and travel to K-12 schools, after-school programs, and co-curricular activities to deliver lessons they create.

MECOP Advisor (Fall 2012-Winter 2015)
I provided academic advice to students in the MECOP program. I had approximately 110 students to advise and provide PIN numbers for registration. In addition, I had to attend the Fall

and Spring MECOP industry board meetings at Mentor Graphics, attend the High School Pre-Select event in the Spring, and attend both selection and placement interviews in the Winter and Spring.

Academic (Fall 2011-Spring 2012)
I provided academic advice to students in the pre-professional program to get the PIN number for registration.

Service

University Service

- University Level: Engineering+ Pilot Committee, 2020-current
- University Level: Engineering+ Taskforce Committee, 2018-current
- University Level: Engineering+ Implementation Ad-Hoc Committee, 2020
- University Level: Engineering+ Co-Curricular Ad-Hoc Committee, 2020
- EECS ABET Coordinator, 2019 - 2020
- 2019 COE Spring Preview Recruiting Event
- 2019 Honors College Recruiting Event
- Academic Success Center and New Student Program/Faculty Outreach Welcome Week Panelist, Fall 2017, 2019
- ACM-W Academic Advisor, Fall 2017-current
- College of Engineering Recruitment Video, 2018-2019
- Honors College Summer Read Program, Fall 2016 - 2018
- Chair, Computer Science Curriculum Committee, 2012-2018
- University Level: EECS Head Director Search Committee, 2017-2018
- University Level: Learning Innovation Task Force, 2017-2018
- EECS Diversity Committee, Fall 2016-Spring 2017
- EECS Student Success Manager Hiring Committee, Fall 2016-Winter 2017
- EECS Scholarship Committee, Spring 2016
- EECS Awards Committee, Spring 2016
- EECS Instructor Search Committee, 2015 – 2016.
- MECOP (Internship) Advisor for Computer Science Students, 2012-2015
- University Level: EECS Head Director Search Committee, 2014 - 2015
- University Level: Undergraduate Education Task Force, 2014 - 2015
- University Level: Undergraduate Engineering Awareness Week, 2014 – 2015
- Computer Science Curriculum Committee, 2011-2012.
- Academic Advisor for Pre-Computer Science Students, 2011-2012.

Service to the Profession

Journal Editorships

- Science of Computer Programming reviewer, 2020
- Computer Science Education Journal reviewer, 2018

Reviewing

- ITiCSE 2021 Paper reviewer

- SIGCSE 2021 Paper reviewer
- 2020 ASEE Paper Reviewer
- Science of Computer Programming Journal Reviewer, 2020
- SIGCSE 2019-2020 Paper reviewer, Session Chair
- NSF Grant Review Panel, 2019, STEM+C
- 2019 VL/HCC Paper Reviewer
- Computer Science Education Journal reviewer, 2018
- ITiCSE 2018 Paper reviewer
- NCWIT seed fund reviewer, Fall 2017
- Book Review: C++ Early Objects (Gaddis) 2015
- Manuscript Reviewer: Educational Research and Evaluation, 2013
- Reviewed papers for the ACMSE Conference, 2010.
- Reviewed papers for the International Conference of the Learning Sciences, 2010.
- Reviewed papers for the ACMSE Conference, 2009.

Other

- CS Undergraduate TA Supervisor for 35-40 Students, 2013-2019
- Oregon Counsel of Computing Chairs Member, 2012-2018

Service to the Public

Professionally Related

- 2018-current CozmOSU K-12 CS Outreach Program
- STEM Academy Summer Camp for Middle School Children, Level 1
- STEM Academy Summer Camp for Middle School Children, Level 2
- 6th and 7th grade 2-week CS Summer Training Sessions for Teachers
- High school ChickTech Saturday event to teach children how to make art with programming, Fall 2019
- NCWIT 2018 and 2019 Oregon & SW Washington Regional Affiliate Awards College Recruitment Fair, Spring 2018 and Spring 2019
- Women in STEM Speed Networking at the FIRST Robotics PNW District Championship, Spring 2018
- Corvallis Boys and Girls Club: Girls Rule: Coding Guest Speaker/Volunteer, Fall 2017-2018
- Volunteer, Hour of Code for 3rd/4th grade and high school students, Fall 2016-2018
- Computational Thinking Dinner Series, 2016: Responsible for the design and organization of a computational thinking dinner series for high school and undergraduate females in the Willamette Valley.
- Student Volunteer. The International Conference for High Performance Computing and Communications (SC03). Phoenix, Arizona. November 17 – 21, 2003.
- Judge. 48th annual Montana State Science Fair. The University of Montana. April 2003.
- Student Volunteer. The International Conference for High Performance Computing and Communications (SC02). Baltimore, Maryland. November 18 – 22, 2002.
- Volunteer. 47th annual Montana State Science Fair. The University of Montana. April 2002.
- Student Volunteer. The International Conference for High Performance Computing and Communications (SC01). Denver, Colorado. November 12 – 16, 2001.

- Volunteer. 46th annual Montana State Science Fair. The University of Montana. April 2001.
- Presided over a session. Southeastern Consortium for Computing Sciences in Colleges (CCSC04). Spartanburg, South Carolina. November 2004.

Other Public Service

- K-12 Outreach Program (CozmOSU), Fall 2019 – Winter 2020
- Volunteer, Elementary School Reading, Fall 2012-Spring 2018

Awards

University or Community Awards

- EECS Professor of the Year 2018 - 2019
- COE Austin Paul Award 2018
- Delta Tau Delta Fraternity Outstanding Teaching Award 2017
- EECS Innovative Teaching Award 2016-2017
- EECS Outstanding Teaching Award, Fall 2015
- Vice Provost's Award for Excellence in Innovation – Online Teaching 2014
- EECS Innovative Teaching Award 2013-2014
- EECS Professor of the Year 2012 - 2013