Caroline D. Hardin

caroline.hardin@wisc.edu | 608.496.1294 | 129 S. Lakewood Garden Lane, Madison, WI 53704

1 Research Groups

Complex Play Lab2014–present

2 Formal Education

2.1 PhD student in Computer Science Education

University of Wisconsin-MadisonMadison, WI2015–present

- Advisors: Matthew Berland and Mike Swift

2.2 M.S. in Curriculum & Instruction

University of Wisconsin-MadisonMadison, WI2015

- Thesis: Learning to program using online forums - A comparison of links posted on Reddit and Stack Overflow
- Advisor: Matthew Berland

2.3 B.S. in Computer Science

University of Wisconsin-MadisonMadison, WI2004

3 Teaching Experience

3.1 Teaching Assistant

University of Wisconsin - MadisonMadison, WI2016–2017

- Planned and led 75 minute classes on 'Video Games and Learning'.
- Advise 40 students a semester on successful writing strategies.
- Utilize Canvas and Desire to Learn to provide instructional support for students.

3.2 Technology Trainer

FreelanceMadison, WI2016–2017

- Designed custom curriculum on Google suite for a non-profit.

3.3 Microsoft Student Partner

MicrosoftMadison, WI2016–2017

- Organize monthly technical workshops for UW Madison students on a variety of topics, including games, mobile technology, web development, IoT Hardware and machine learning.

3.4 Computer Science Tutor

University of Wisconsin - MadisonMadison, WI2016–present

- Assist students in introductory computer science classes with code and theoretical concepts.

3.5 Computer Science Workshop Designer

University of Wisconsin - MadisonMadison, WI2016–2017

- Collaborating with a team to design and lead a MIT App Inventor workshop for freshmen who have not yet declared their major but are considering computer science.

3.6 Adjunct Instructor of Information Technology

ITT Technical InstituteMadison, WI2011

- Taught Linux System Administration, Windows 7, and Introduction to the PC (hardware tech support).

3.7 Program Chair of Information Technology

Globe University EastMadison, WI2010–2011

- Taught a variety of IT courses, including Operating Systems, Microsoft Office, Keyboarding, and Introduction to Computer Literacy.

- Provided programmatic support for students and faculty with training, advising, recruitment, and hiring.

- Developed and maintained facility and curriculum resources, including a Blackboard implementation.

- Organized and led community workshops.

3.8 Peace Corps Information and Communication Technology (ICT) Teacher Volunteer

Peace Corps GhanaNalerigu, Ghana; Mampong, Ghana2007–2010

- Creatively used limited resources to teach hands-on skills and theory to over 850 high school students, 200 elementary students, and 220 adults. Class sizes ranged from 4 to 70 students.

- Set up, administered and designed curriculum for one of the first networked dual boot Ubuntu Linux/Windows XP labs in Ghana.

- Mentored 5 high-school and university teachers with lesson planning and instructional design.

- Trained dozens of academic staff members in basic computer skills, hardware repair, software installations, and lab administration.

- Coordinated and produced student cultural dance and HIV/AIDS educational video projects.

- Helped organize the website, served as a group leader, and taught ICT at 3 annual week-long STARS (Students Taking Action Reaching For Success) high-school conferences.

- Created, promoted and distributed the ICT Resource CD for ICT teachers and students, which contained a full range of culturally appropriate instructional materials including lesson plans, exams, textbooks, educational open source software, and classroom technology tips.

- Coordinated the ICT Think-Tank: representing over 140 volunteers, this committee worked on dozens of cutting-edge technology projects, including designing and creating informational websites, writing educational computer lab manuals, and developing the Library Linux operating system.

- Organized and led the ICT technical training for incoming volunteers at numerous workshops and conferences.

- Organized and led four clubs (Staff Ubuntu Linux Club, Elective ICT Club, Websites and Internet Club, and the Middle School Girls Club) and coordinated projects with an HIV/AIDS club.

3.9   ESL Computer Tutor Volunteer

Minnesota Literacy CouncilMinneapolis, MN2006–2007

- Tutored ESL adults in basic computer skills.

4 Relevant Work Experience

4.1 TEALS Technology Education And Literacy In Schools

Wisconsin Regional ManagerMadison, WI2017–present

- Recruit, train and supervise 35+ IT professional volunteers.
- Support 13 classroom teachers.
- Design and implement school recruitment strategy for region.

4.2 Games + Learning + Society

Conference Co-ChairMadison, WI2015–2016

- Created and managed a six-figure budget.
- Recruited, trained and supervised over 40 volunteers.
- Managed the conference web site, social media, and responded as primary point of contact.
- Organized venue logistics and coordinated the schedule.

4.3 Instructional Technology and Communication Assistant

DoIT Academic Technology, University of Wisconsin at MadisonMadison, WI2013–2015

- Provided technical assistance and training to faculty and staff in Moodle and Desire to Learn.
- Assist faculty in using technology in instructional design.
- Developed in JavaScript, CSS and HTML for ARIS and SIFTR.
- Supported faculty and staff with academic technology issues.
- Provided technical support and forum moderation for MOOC with over 40,000 users.
- Designed games and new user trainings for ARIS.
- Resolved technical issues for users of Case Scenario/Critical Reader digital narrative tool.

4.4 Director of Religious Education

James Reeb Unitarian Universalist CongregationMadison, WI2011–2014

- Recruited, trained, and supervised over 20 volunteer teachers each semester.
- Coordinated inspiring and meaningful curriculum activities across 5 classrooms (ages 0–18).
- Organized community building workshops, fairs and events.
- Created and maintained digital pedagogy support and communication tools.

4.5   Technical Support Coordinator

United Cerebral Palsy of Greater Dane CountyMadison, WI2012–2013

- Administered Windows Server 2008, Exchange 2010, anti-virus, security, and backup systems.
- Provided technical support and training for over 65 Windows and iPad users.
- Developed organization-wide technology strategy to take advantage of new digital tools.

4.6   Information Support Specialist

McQuay InternationalMinneapolis, MN2005–2006

- Programmed in FoxPro to improve and support a legacy order entry system processing over 1 million dollars in orders a day.
- Provided phone and email based training and troubleshooting for international sales reps and engineers.
- Created a new documentation database with tutorial documents for three major systems.

4.7   Programmer, Web Developer and System Administrator

Center for Demography in Health and AgingMadison, WI2002–2005

- Administered the OLDR (Off-line Longitudinal Data Repository) Red Hat Linux system.
- Developed CDHA's website using HTML, CSS, DreamWeaver and Photoshop.
- Designed PHP forms with dynamically linked ASP and SQL databases.
- Wrote extensive documentation for the IT systems and protocols.

5 Peer-Reviewed Conference Proceedings

5.1 A sociocultural analysis of digital privacy curricula

AERANew York, NY2018

5.2 Using Embodied Cognition to Teach Open Source Software

FABLEARNStanford, CA2016

5.3 Reddit /r/learnprogramming VS StackOverflow

SIGCSE - Special Interest Group Computer Science EducationMemphis, TN2016

6 Conference Presentations

6.1 Education Panel

HackersSanta Cruze, CA2017

6.2 E-Textiles in Education

HackersSanta Cruze, CA2017

6.3 BrickOpenCode: Learning about software licenses with LEGOs and Scratch

DEFCON R00TZLas Vegas, NV2016

6.4 An argument for applying educational theory to computer science education

HackersSanta Cruze, CA2016

6.5 Brick in the Wall vs. Hole in the Wall: Education for hackers and hacking education

BSides Las VegasLas Vegas, NV2014

6.6 Free and Open Source Software in School Communities

Open Source Systems ConferenceHammamet, Tunisia2012

6.7 Free as in Freedom: the vision of open source software in education

Software Freedom DayMonastir, Tunisia2012

6.8 Using Technology in the Ghanaian Classroom

BarCamp GhanaAccra, Ghana2009

6.9 The Promise and Potential of Open Source Software in Education

Free and Open Source Software DayAccra, Ghana2009

8 Service Activities

7.1 Book Chapters
8.1 Board Member

Danenet2017 – ongoing

- Advise on technology initiatives

8.2 Director

MadHacks2016 – 2017

- Leads student hackathon group which organizes technology events for 100-600 students. https://www.madhacks.org/

8.3 Chair of Education Committee

Bodgery Makerspace2016 – ongoing

- Recruits local technology experts and artists to run workshops. Facilitates and supports educational outreach efforts. In addition, has taught classes in e-textiles, software licenses and privacy.

8.4 Electronic Textiles Volunteer Instructor

Madison Children's Museum2015

- Designed, Coordinated and Taught a workshop on electronic textiles for middle school girls. http://madisonchildrensmuseum.org/event/digi-design/

8.5 Saturday Science presenter

Wisconsin Institute for Discovery2016

- For this event, I designed and presented a hands-on e-textile table. Several electronic textile projects were created to be hands-on circuitry and programming concept demonstrations. Participants were also invited to try programming a LilyPad Arduino Proto-Snap development board which had been set up with example code and tutorial packets. 'Try it at home' handouts were also created.

8.6 Game Design and Code Club volunteer

Wingra School2015–2016

- Guide elementary school students in creating games with Scratch, Scratch Jr., Game Star Mechanic, and Google Sketchup in a weekly Game Design and Code after school club.

8.7   Tech Presenter

Expanding Your Horizons2015 & 2016

- Worked with UW Professor Deb Deppeler to design a 1 hour 'Introduction to C Programming with E-Textiles' program for middle school girls. Final product included 4 sets of code with tutorial packets for the girls to explore different aspects of circuits, electronics and C programming, which are available under Creative Commons license

8.8   Hour of Code Volunteer

We Think Big, Inc.2015

- Helped local teachers explore computer programming at an Hour of Code event.

8.9   Wisconsin Science Festival Outreach Volunteer

UW Madison WACM (Women of Association for Computing Machinery)2015

- Taught the basics of binary numbers to children and parent attendees of the Wisconsin Science Festival, and assisted them in creating bracelets which used beads to represent their birthdays and initials in binary.

8.10   Women and Identity in Gaming Symposium Invited Panelist

Lawrence University2015

- Discussed the research around women's identity in game development and other technology fields.

8.11   Woman's Hackathon Coordinator

University of Wisconsin-Madison2014

- Co-organized the 2014 International Woman's Hackathon at UW-Madison, including event planning, recruiting judges and mentors, soliciting donations, graphic design, and advertising.

8.12   Games Learning Society 2014 Conference Awards Designer

Learning Games Network2014

- Designed and created the Showcase awards for the GLS 2014 conference. The 4 award sizes were designed in 3D Lego modeling software, then the 2,000 custom selected LEGOs were purchased from 10 different international vendors to conform to budget and schedule constraints. A team of volunteers was guided in assembling the awards.

8.13   Women's Designathon Organizer

Doyenne GroupMadison, WI2013

- Led organization and vision setting for this hackathon style 2-day event, including participating in fund-raising, mentor recruitment, advertising, graphic design, and participant recruitment.

8.14   Volunteer Coordinator of Educational Technology

Sector67Madison, WI2012

- Organized and taught courses on technology topics, including Linux, Java, and Technology for Students.

8.15   Database Design Volunteer

Grassroots Leadership CollegeMadison, WI2010–2012

- Re-designed FileMaker databases for conversion to CiviCRM; recovered data with Pentaho.

- Led a committee of IT volunteers in setting a new IT vision.

- Troubleshot general office technology issues and provided various tech trainings.

9   Awards and Honors

- Placed 2nd at the 2016 SIGCSE Student Research Competition for a poster and presentation on how people learn programming through links posted on Reddit and Stack Overflow.

- Awarded 'Best Theme' at the Convergence 2016 costume masquerade for a 'Magic Carpet' costume, which incorporated a LilyPad Arduino with NeoPixels and a matching Gemma-powered magic lantern.

- Placed 2nd at the 2014 Madworks Cryptocurrency Hackathon for a digital badge based game for Bitcoin.

10   Grants and Travel Awards

- Grace Hopper

- BSides Proving Ground

- Microsoft Research E-Textiles Grant