LOUISA CONWILL

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louisaconwill.github.io

EDUCATION

University of Notre Dame   Notre Dame, IN

Ph.D. Computer Science   2021 - 2026 *expected*
  Academic advisor: *Dr. Walter Scheirer*

University of Mary   Bismarck, ND
Graduate Certificate, Professional Campus Ministry   2020

Brown University   Providence, RI
Sc.B., Computer Science   2013 - 2017

PUBLICATIONS

Reviewed Conference Papers

Conwill, L., Anthony, S., & Scheirer, W. "Has the Virtualization of the Face Changed Facial Perception? A Study of the Impact of Photo Editing and Augmented Reality on Facial Perception." In *Extended Abstracts of the CHI Conference on Human Factors in Computing Systems (CHI EA '24), May 11–16, 2024, Honolulu, HI, USA.*

Books

Conwill, L., Levis, M., & Scheirer, W. *Virtue in Virtual Spaces: Catholic Social Teaching and Technology.* Liturgical Press, September 2024.

Periodicals

Conwill, L. "Virtue in Virtual Spaces: Catholic Social Teaching as an Alternative." *Church Life Journal,* December 3rd, 2024.

PRESENTATIONS

Conference Talks

Notre Dame De Nicola Center for Ethics and Culture. *"What Is Owed to Persons in Digital Spaces? Evaluating Popular Social Media Applications Through the Lens of Catholic Social Teaching."* 'Dust of the Earth': On Persons. November 2023, Notre Dame, Indiana.

Notre Dame Center for Social Concerns. *"Using Catholic Social Teaching to Develop Virtuous Social Technologies."* Justice Sown in Peace: Celebrating 60 Years Since Pacem in Terris. March 2023, Notre Dame, Indiana.

Notre Dame De Nicola Center for Ethics and Culture. *"Using Catholic Social Teaching to Develop Virtuous Social Technologies."* 'And It Was Very Good': On Creation. November 2022, Notre Dame, Indiana.

Franciscan University. *"Using Catholic Social Teaching to Develop Virtuous Social Technologies."* Software/Cyber Engineering Ethics Conference: Virtue in a Virtual World. October 2022, Steubenville, Ohio.

Posters

Honolulu, Hawaii, *"Has the Virtualization of the Face Changed Facial Perception? A Study of the Impact of Augmented Reality and Photo Editing on Facial Perception."* CHI 2024, May 2024

University of Notre Dame London Global Gateway, *"Has the Virtualization of the Face Changed Facial Perception? A Study of the Impact of Augmented Reality on Facial Perception."* Workshop on Humans, Deep Networks & Face Recognition, March 2023.

University of Notre Dame, *"Using Catholic Social Teaching to Develop Virtuous Social Technologies."* Rome Call for AI Ethics, November, 2022.

Invited Talks

"Virtue in Virtual Spaces: Catholic Tradition and the Digital Age," with M. Levis, invited talk at *Gold Mass Lecture*, Benedictine University, Lisle, Illinois, November 2024.

"Virtue in Virtual Spaces: Catholic Social Teaching and the Internet," with M. Levis and W. Scheirer, invited panel talk at *Catholic Social Teaching and Technology: Reimagining the Internet*, a SPIRE conference sponsored by the Center for Social Concerns at Notre Dame, Mumbai, India, March 2024.

"Discernment Takeaways From My Journey as a Catholic and a Scientist." Society of Catholic Scientists Breakfast, University of Notre Dame, Notre Dame, Indiana, February 2023.

RESEARCH AND WORK EXPERIENCE

University of Notre Dame   Notre Dame, IN
  Graduate Research Assistant, Department of Computer Science and Engineering   2021 - present
  Research Projects:
  - Human and machine perception of faces filtered with social media filters
  - Catholic Social Teaching as a framework for technology ethics

Academic advisor: Dr. Walter Scheirer

Fellowship of Catholic University Students   Pittsburgh, PA
Campus Missionary   2019 - 2021
  - Invited college students at Carnegie Mellon University deeper into the Catholic faith through leading two weekly Bible studies with 2-8 participants, leading faith mentorship meetings, and hosting large group formation events.

- Fundraised annual salary of $50,000 and maintained relationships with donors through individual contact and quarterly newsletter.
- Helped coordinate and execute retreats, conferences, and domestic and international service trips.

Amazon   Cambridge, MA
Software Development Engineer   2017 - 2019

- Designed the database schema for, and implemented in Java, a major component of the primary system used internally to generate datasets for training Alexa machine learning models and generating business reports, handling thousands of transactions per second. Promoted the new system to users through large group presentations and one-on-one onboarding.
- Worked as a security reviewer, verifying that software built by teams across Alexa met Amazon's security standards before deployment.
- Maintained team's codebase, adding new features and fixing bugs. Participated in a monthly/bi-monthly on-call rotation, fixing issues with the team's software and responding to pages outside of work hours for urgent issues.

Amazon   Cambridge, MA
Software Development Engineer Intern   Summer 2016

- Developed a user interface to determine whether specific utterances were supported in the Automatic Speech Recognition models and Natural Language Understanding models currently in production for the Alexa speech recognition platform.

Amazon   Seattle, WA
Software Development Engineer Intern   Summer 2015

- Worked on the Amazon Link Electronic Data Interchange team. Developed a framework in Java to automate the running of Apache Spark applications that collect metrics through parsing large numbers of log files.

TEACHING EXPERIENCE

Guest Lecturer

University of Notre Dame   Notre Dame, IN

- Guest Lecture for Dr. Megan Levis, STV/TEC/EG 33999: Technology, Self, and Society (Fall 2022, Spring 2023, Spring 2024)

Teaching Assistant

University of Notre Dame   Notre Dame, IN
Computer Science and Engineering Department

- CSE 40535: Special Studies: Computer Vision (Spring 2025)
- CSE 40175: Ethical and Professional Issues (Fall 2021, Spring 2022, Fall 2024)

Brown University   Providence, RI
Computer Science Department

- CS17: Integrated Introduction to Computer Science, Semester I (Fall 2014, Fall 2015)
- CS18: Integrated Introduction to Computer Science Semester II (Spring 2016, **Head TA**)
- CS22: Introduction to Discrete Structures and Probability (Spring 2015)
- CS157: Design and Analysis of Algorithms (Fall 2016)
- CS138: Distributed Systems (Spring 2017, **Head TA**)

FELLOWSHIPS

University of Notre Dame   Notre Dame, IN
Center for Social Concerns   2023-2024
Graduate Justice Fellowship   *Faculty mentorship, $3000 stipend*

University of Notre Dame   Notre Dame, IN
de Nicola Center for Ethics and Culture   2023-present
Sorin Fellows Program   *Conference funding and programming*

HONORS

University of Notre Dame   Notre Dame, IN
Computer Science and Engineering Department Outstanding Teaching Assistant Award   2022

Toastmasters International   Cambridge, MA
Area 35 Table Topics Contest First Place Winner   2019

Brown University   Providence, RI
The Gladys C. and Sherwin J. Kapstein Family Fund Award for Interfaith Leadership   2017

LEADERSHIP ACTIVITIES

Brown University Peer Advising   2014-2017

- Meiklejohn Peer Advisor—Partnered with a faculty advisor to guide a group of students throughout their first year with course selection and adjustment to university life (Fall 2014 - Spring 2016).

- Women in Computer Science Mentor—Worked one-on-one with a female computer science student at Brown, providing advice on academics and how to navigate a male-dominated field (Spring 2015 – Spring 2017).

Brown-RISD Catholic Community Pastoral Council   2014-2016
- Served as one of two Co-Coordinators from Fall 2015 to Fall 2016, providing support, vision, and guidance to further the community's mission and ensure coordination among its leaders.
- Served as Fellowship Coordinator in the 2014-2015 academic year, focusing on strengthening the bonds among members of the community.

Avi Schafer Interfaith Shabbat Co-Chair, Brown University   2017
- Served as one of two primary coordinators for the Avi Schaefer Interfaith Shabbat, a Shabbat dinner and weekend of events fostering interfaith understanding. Worked with Brown University chaplains and students from various religious backgrounds to organize events for the weekend.