Curriculum Vitae

Sai Shruthi Chivukula | shruthichivukula.com

RESEARCH | TEACHING | SERVICE

Education

2017-2021 Purdue University, West Lafayette, Indiana

Degree: Doctor of Philosophy Advisor: Dr. Colin M. Gray

Major: Technology, HCI Concentrations: UX Design & Qualitative Research

Dissertation Title: Designing for Co-Creation to Engage Multiple Perspectives on

Ethics in Technology Practice https://doi.org/10.25394/PGS.15036321.v1

2011-2015 Indian Institute of Technology (IIT), Guwahati, India

Degree: B. Des Advisor: Dr. Prasad Bokil

Major: UX Design Minor: Mechanical Engineering

Academic and Professional Experience

(10 years)

2023-Current Assistant Professor, School of Information, Pratt Institute (Manhattan, New York)

Domain: Information Experience Design

Role: Instructor of record for graduate-level courses: INFO 601 Foundations of Information and INFO 643 Information Architecture and Interaction Design.

2021-2023 Visiting Assistant Professor, School of Informatics, Computing, and Engineering

Indiana University (Bloomington, Indiana)

Domain: HCI and UX Design

Role: Instructor of record for graduate-level courses: I541-Introduction to HCI/d; I542-Foundations of HCI theory, I543-Interaction Design Methods; I549-Advanced Prototyping; I694- Thesis in Human Computer Design and Development. Established the "Ethics Collective" as a research collaborator.

Engaged in departmental service on the admissions committee.

2017-2021 Graduate Research Assistant, UXP² Lab, Purdue University (West Lafayette, Indiana)

Domain: Dark Patterns, design practice, ethics and values

Role: Conducted qualitative research and analysis under NSF Grants #1909714 and

#1657310. Led multiple studies, mentored undergraduate and graduate

researchers, and assisted in grant writing. Teaching assistant in Spring'19 for CGT

172-08 User Experience Design Studio 1: Fundamentals.

2015-2017	Senior UX Designer and Researcher, Samsung R&D (Bangalore, India)

Domain: Intelligence UX, Natural User Experience

Role: Researcher, UX and Interaction Designer for Next-Gen technology solutions. Designer of Intelligent Agent—BIXBY. Collaborator with HQ team in South Korea.

**Other Work Experience also includes a range of Industrial Internships.

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2022-23	Excellence in Teaching Award, Luddy School of Informatics, Indiana University, Bloomington
2022	LAIDEL Faculty Fellowship, Luddy School of Informatics, Indiana University, Bloomington (\$10,000)
2021-22	Excellence in Teaching Award, Luddy School of Informatics, Indiana University, Bloomington
2020	Honorable Mention, ACM SIGCHI Conference on Designing Interactive Systems
F'19-SU'20	Purdue Research Grant Fellowship, Purdue University, Indiana (\$54000)
2019	Best of CHI Honorable Mention, SIGCHI Conference on Human Factors in Computing Systems.
F'18-SP'19	SRIVER Graduate Scholarship, Purdue University, Indiana (\$1700)
2016	Employee of the Month, Samsung R&D, Bangalore, India
2012-2013	Institute Merit Scholarship: Best academic performance-Highest GPA, IIT Guwahati, India
2008	Certificate of Excellence in Music: Distinction in Certificate Course, Carnatic Classical (Vocal)

Music from Potti Sreeramulu University, Govt. of Andhra Pradesh

RESEARCH

CHI- 12 (4 Published (*1 Honorable Mention), 3 Extended Abstracts, 4 In Review, 1 Workshop); **DIS- 4** (2 Published (*1 Honorable Mention), 2 Extended Abstracts); **CSCW- 3** (2 Published, 1 In Review); Other venues include DRS, Design Studies, ICER, Interactions, Interacting with Computers, British HCI.

Refereed Conference Proceedings

In Review

Chivukula, S. S., & Gray, C. M. (in review). What Do I Need to Design for Co-Design? Supporting Co-design as a Designerly Practice. https://arxiv.org/abs/2210.02986. To submit to CHI'24.

Gray, C. M.*, Obi, I.*, Chivukula, S. S.*, Carlock, T., Pivonka, A., Johns, J., Li, Z., & Rigsbee, B. (in review). Practitioner Trajectories of Engagement with Ethics-Focused Method Creation. http://arxiv.org/abs/2210.03002. To submit to CHI'24.

Published

Gray, C. M., Chivukula, S. S., Carlock, T., Li, Z., & Duane, J. (2023, July). Scaffolding Ethics-Focused Methods for Practice Resonance. In *Designing Interaction Systems Conference (DIS'23)*. ACM Press. https://doi.org/10.1145/3563657.3596111 [Awarded Best Paper, Top 1%]

Chivukula, S. S., Hasib, A., Li, Z., Chen, J., & & Gray, C. M. (2021). Identity Claims that Underlie Ethical Awareness and Actions. In *CHI'21: Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems*. https://doi.org/10.1145/3411764.3445375

Goffe, L., Chivukula, S.S., Bowyer, A., Bowen, S., Toombs, A., & Gray, C. M. (2021). Appetite for Disruption: Designing Human-Centred Augmentations to an Online Food Ordering Platform. In *Proceedings of the 33rd British Human Computer Interaction Conference*. University of West London, London, UK. http://dx.doi.org/10.14236/ewic/hci2021.16

Gray, C. M., Chivukula, S. S., Manocha, R., Melkey, K. (2021). Understanding "Dark" Design Roles in Computing Education. In *ICER'21: Proceedings of the 2021 ACM International Computing Education Research*. https://doi.org/10.1145/3446871.3469754

Chivukula, S. S., & Gray, C. M. (2020). Co-Evolving Towards Evil Design Outcomes: Mapping Problem and Solution Process Moves. In *Proceedings of the Design Research Society Conference*. Brisbane, Australia: Design Research Society. https://doi.org/10.21606/drs.2020.107

Gray, C. M., Chivukula, S. S., & Lee, A. (2020). What Kind of Work Do "Asshole Designers" Create? Describing Properties of Ethical Concern on Reddit. In *DIS'20: Proceedings of the 2020 ACM Designing Interactive Systems Conference*, 61–73. https://doi.org/10.1145/3357236.3395486 [Awarded DIS Honorable Mention, top 5%]

Chivukula, S. S., Watkins, C. R., Manocha, R., Chen, J., & Gray, C. M. (2020). Dimensions of UX Practice that Shape Ethical Awareness. In *CHI'20: Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems*. https://doi.org/10.1145/3313831.3376459

Chivukula, S. S., Gray, C. M., & Brier, J. A. (2019). Analyzing Value Discovery in Design Decisions Through Ethicography. In *CHI'19: Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems*. https://doi.org/10.1145/3290605.3300307 [Awarded Best of CHI Honorable Mention, top 5%]

Gray, C. M., & Chivukula, S. S. (2019). Ethical Mediation in UX Practice. In *CHI'19: Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems*. https://doi.org/10.1145/3290605.3300408

Chopra, S., & Chivukula, S. S. (2017). My phone assistant should know I am an Indian: influencing factors for adoption of assistive agents. In *Proceedings of the 19th International Conference on*

Human-Computer Interaction with Mobile Devices and Services. https://doi.org/10.1145/3098279.3122137

Ghosh, S., Chivukula, S. S., Bansal, H., & Sethia, A. (2017). What is user's perception of naturalness? an exploration of natural user experience. In *INTERACT'17: Proceedings of the 13th International Conference of IFIP Conference on Human-Computer Interaction*, 224–242. https://link.springer.com/chapter/10.1007/978-3-319-67684-5_14

Bansal, H., Chivukula, S. S., & Ghosh, S. (2016). Exploring Design for Multi-device, Multi-environment and Multimodal Connected Experiences. In *Proceedings of the 4th International Conference of Distributed, Ambient and Pervasive Interactions*, 15–25. https://doi.org/10.1007/978-3-319-39862-4_2

Journal Publications

In Review

Chivukula, S. S., Li, Z., Chen, J., Pivonka, A. C., & Gray, C. M. (in review). Surveying the Landscape of Ethics-Focused Design Methods. In arXiv [cs.SI]. arXiv. https://arxiv.org/abs/2102.08909. Submitted to CHI'23.

Obi, I., Gray, C. M., Chivukula, S. S., Duane, J.-N., Johns, J., Will, M., Li, Z., & Carlock, T. (in review). Let's Talk About Socio-Technical Angst: Tracing the History and Evolution of Dark Patterns on Twitter from 2010-2021. *In arXiv [cs.SI]. arXiv.* http://arxiv.org/abs/2207.10563 In review at TSC.

Published

Goffe, L. Chivukula, S. S., Bowyer, A., Bowen, S., Toombs, A. L., & Gray, C. M. (2022). Web Augmentation for Well-being: The Human-Centered Design of a Takeaway Food Ordering Digital Platform. *Interacting with Computers, 33*(4), 335-352. https://doi.org/10.1093/iwc/iwac015

Gray, C. M., Chivukula, S. S., Hasib, A., & Li, Z. (2022). Using Decisive Constraints to Create Design Methods to Guide Ethical Impact. *Design Studies*, 79, Article No. 101097. https://doi.org/10.1016/j.destud.2022.101097 [Nominated for The Design Studies best paper award for 2022]

Gray, C. M., Chen, J., **Chivukula**, **S. S.**, & Qu, L. (2021). End User Accounts of Dark Patterns as Felt Manipulation. *Proceedings of the ACM: Human-Computer Interaction*, *5*(CSCW), Article 372. https://doi.org/10.1145/3479516

Gray, C. M., & Chivukula, S. S. (2021). "That's dastardly ingenious": Ethical Argumentation Strategies on Reddit. *Proceedings of the ACM: Human-Computer Interaction, 5*(CSCW), Article 70. https://doi.org/10.1145/3449144

Book Chapter

Chivukula, S.S. (2022). Cultural Diversity as a design precedent: A (Feminist) Angle to HCI/d Expansion. In *Technological Feminism: Contemporary Multi and Transdisciplinary Views of Women in Technology by Researchers*. https://ria.ua.pt/handle/10773/37656

Trade Publications

Chivukula, S. S. (2020, November). Feminism(s) through Design: A practical guide to implement and extend feminism. *Interactions*, *27*(6), 36-40. https://doi.org/10.1145/3427338

Gray, C. M., & Chivukula, S. S. (2019). When does manipulation turn a design "dark"? *Interactions*, 27(1), 96. https://doi.org/10.1145/3375016

Extended Abstracts

Chivukula, S. S., Obi, I., Carlock, T., & Gray, C. M. (2023, July). Wrangling Ethical Design Complexity: Dilemmas, Tensions, and Situations. In Designing Interactive Systems Conference (DIS Companion '23). ACM Press. https://doi.org/10.1145/3563703.3596632

Gray, C. M., Chivukula, S. S., Bongard-Blanchy, K., Mathur, A., Gunawan, J., & Schaffner, B. (2023, April). Emerging Transdisciplinary Perspectives to Confront Dark Patterns. Extended Abstracts of the 2023 CHI Conference on Human Factors in Computing Systems (CHI EA '23). https://doi.org/10.1145/3544549.3583745

Chivukula, S. S., & Gray, C. M. (2020). Bardzell's "Feminist HCI" Legacy: Analyzing Citational Patterns. In CHI EA'20: Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems. https://doi.org/10.1145/3334480.3382936

Chivukula, S. S., Watkins, C., McKay, L., & Gray, C. M. (2019). "Nothing Comes Before Profit": Asshole Design In the Wild. In *CHI EA'19: Extended Abstracts of the 2019 CHI Conference on Human Factors in Computing Systems*. https://doi.org/10.1145/3290607.3312863

Chivukula, S. S., Brier, J., & Gray, C. M. (2018). Dark Intentions or Persuasion? UX Designers' Activation of Stakeholder and User Values. In *DIS'18: Proceedings of the 2018 ACM Conference Companion Publication on Designing Interactive Systems*, 87–91. https://doi.org/10.1145/3197391.3205417

Fansher, M., Chivukula, S. S., & Gray, C. M. (2018). #darkpatterns: UX Practitioner Conversations About Ethical Design. In CHI EA'18: Extended Abstracts of the 2018 CHI Conference on Human Factors in Computing Systems. https://doi.org/10.1145/3170427.3188553

Refereed Workshops

Lukoff, K., Hiniker, A., Gray, C. M., Mathur, A., & Chivukula, S. S. (2021). What Can CHI Do About Dark Patterns? Workshop at CHI 2021, Virtual Conference. https://doi.org/10.1145/3411763.3441360

Gray, C. M., Chivukula, S. S., Toombs, A. L., Light, A., (2018). Visualizing Values to Analyze Designers' Ethical Responsibility. Workshop at Design Research Society 2018, Limerick, Ireland.

Gray, C. M., Chivukula, S. S. (2018). Engaging Design Students in Value Discovery as "Everyday Ethicists". Workshop at DECIPHER. Dialogue: Proceedings of the AIGA Design Educators Community Conferences (Decipher, Vol. 1), 187–189. Ann Arbor, Michigan. https://doi.org/10.3998/mpub.11688977

Conference Presentations

2019 Gray, C. M., & Chivukula, S. S. (2019, April). (Un)Designing "Darkness" in Computing Education. Paper Session at the 2019 AERA Annual Meeting, New York, NY. [Presented by co-author]

Invited Talks and Participation

July'23	"The other side of UX Design", Residential Program on UX Design and HCI, IIT
	Guwahati, India
Jun'22	Summer Institute, Consortium for the Science of Sociotechnical Systems (CSST).
	UT, Austin.
May' 22	"Deceptive Patterns in UX", Content Strategy Los Angeles Meetup (CSLA).
May' 22	"Exploring Feminisms through Design in HCl Education", Master Class, EduCHI
	Symposium at 2022 CHI Conference on Human Factors in Computing Systems.
Nov' 21	"Ethics and Values in HCI Practice", Digital Media Lab at University of Bremen.

Websites

2023	A.E.I.O.YOU Toolkit for Ethics in Practice: https://shruthichivukula.com/aeiou-toolkit
2022	Ethics-Focused Methods in Design: https://everydayethics.uxp2.com/methods

Research Projects

2022-Present Ethics (Education) Collective [WIP]

P.I: Dr. Sai Shruthi Chivukula, Indiana University, Bloomington

Key collaborator: Ajit Pillai, Doctoral Student, University of Sydney.

Keywords: Sociotechnical practice, Ethics education, HCI and Design educators

Role: (Ongoing) Leading research design and planning, data collection, logistics, and documentation for an Ethics Collective to engage researchers with resources in the fields of HCl and design. Initially, I am framing these research efforts as describing attitudes and actions around Ethics Education (disseminated through "The 'E' Word" Podcast) and working towards grant writing efforts to support further collaboration and dissemination.

2019-Present CHS: Small: "Everyday Ethics" in Sociotechnical Practice

P.I: Dr. Colin M. Gray, Purdue University

Keywords: Sociotechnical practice, everyday ethical awareness, ethics and values, qualitative research, methods and approaches

Role: Assisted in grant writing and annual report writing. Led multiple studies, wrote research articles, and mentored undergraduate and graduate research assistants. Led and engaged in co-design workshops with technology practitioners, with data analysis still ongoing with members of UXP2 Lab.

NSF Award Information: https://www.nsf.gov/awardsearch/showAward?AWD_ID=1909714

2017- 2019 CRII: CHS: Dark patterns, Pragmatist Ethics, and User Experience

P.I: Dr. Colin M. Gray, Purdue University

Keywords: UX Design, ethics and values, dark patterns, qualitative research

Role: Led multiple studies, wrote research articles, and mentored undergraduate and graduate research assistants.

NSF Award Information: https://www.nsf.gov/awardsearch/showAward?AWD_ID=1657310

TEACHING

Courses

FA'23 INFO 601- Foundations of Information (Primary Instructor; Curriculum Designer)

This foundational course focuses on the intersection of people, information, and technology and the theoretical and conceptual foundations of the information field. Students will be introduced to ideas and concepts that will inform future specializations in their course of study and provide them with concrete strategies for ongoing professional growth and development in their area of interest.

FA'23 INFO 643- Foundations of Information (Primary Instructor; Curriculum Designer)

This course provides students with practical knowledge and hands-on experience designing digital interfaces from a user-centered perspective through an exploration of the dual practices of information architecture and interaction design.

FA'22.SP'23 INFO 694- Thesis/Project In HCI (Primary Instructor; Curriculum Designer) [Syllabus 1] [Syllabus 2]

Thesis course marks the final year showcase of graduate student's independent design projects, supported and mentored through the course. Students will apply their design learning as individual HCl/d practitioners; with scaffolds provided by the instructor.

FA'2022 INFO 549- Advanced Prototyping (Primary Instructor; Curriculum Designer) [Syllabus]

The course will cover issues surrounding the construction of prototypes (e.g., breadth, depth, look, interaction, low/high, vertical/horizontal, etc.). Students will practice manipulating different prototyping materials, both physical and digital, and learn about different prototype evaluation techniques; through project-based learning.

SP'2022,23 INFO 543- (UX) Interaction Design Methods (Primary Instructor; Curriculum Designer) [Syllabus]

This course aims to provide a foundation for understanding, choosing, and doing human-computer interaction (HCI) design methods. Students learn about various methods designers can use and learn for user research, analysis, designing, prototyping, testing, etc.; through project-based learning. **Core Course in Masters HCI/d program @IU.

SU'2022 INFO 300- Human Centered Design and Development (Primary Instructor; Major Course Redesign)

This course introduces students to the foundations of Human-Computer Interaction Design (HCI/d). This course aims to teach HCI/d students about design research/practice and various methods designers can use and learn for user research, analysis, designing, prototyping, testing, etc; through project-based learning. [Syllabus]

FA'2021 INFO 542- Foundations of HCI Theory (Co-Instructor; Assisted in Curriculum Redesign)

This course teaches foundational theories and history of HCl as a multi-disciplinary field. Students will learn the waves of HCl research and practice to conduct applicable turn points into their HCI/d practice. **Core Course in Masters HCI/d program @IU.

FA'2021 INFO 541- Introduction to HCI/d Practice (Co-Instructor; Assisted in Curriculum Redesign; Stakeholder)

This course offers a holistic and practice-oriented introduction to Human-Computer Interaction Design. Through discussion and creative and reflective response to a broad range of topics relating to HCI/d research and practice, participants will be introduced to different aspects of HCI and Design. Stakeholder for one of five projects to collaborate and guide ~20/74 students. **Core Course in Masters HCI/d program @IU.

SP'2019 CGT 17208- Studio 1: Fundamentals (Teaching Assistant)

Teaching Assistant for grading, providing student critiques, and managing studio logistics.

Invited Guest Lectures

FA' 2021 Master Class (EduCHI @ CHI 2022 Conference)

Gave a master class to HCI educators and researchers on "Exploring Feminisms through Design in HCI Education" at the EduCHI Symposium at 2022 CHI Conference on Human Factors in Computing Systems.

1544- Experience Design (Indiana University) FA' 2021,22

Gave a lecture to HCI/d Masters students about "Dark User Experience" and related concepts in Ethics in Design.

SP'2019 A&D 316: Seminar on Ideas on Industrial Design (Purdue University)

Gave a lecture to Art and Design students about "Data Collection + Data Analysis" in the UX design process. [material]

SP'2020 EDCI 616: Qualitative Research Methods (Purdue University)

Facilitated a class to work through qualitative design before the data collection phase. [lesson plan and worksheet]

SERVICE

To the Department

2021-22	Member, Informatics Graduate Admission Committee, Indiana University
2019-20	Graduate Student Representative, CGT Search Committee, Purdue University

To the Academic Community

2022	AC and Session Chair for CHI; Reviewer for TOCHI, NordiCHI.
2021	Reviewer for CHI, CSCW, ISTJ.
2020	PC member for DIS PWiP; Reviewer for CHI, CSCW.
2019	Reviewer for CHI, Creativity and Cognition, CSCW, and Design Studies.
	Student Volunteer at CHI conference.
	Student Volunteer at DECIPHER conference.
2018	Reviewer for DIS Pictorial PWiP.