

# Dr. Chanel Beebe

ChanelBeebe.com  
chanel@beebearts.com

## EDUCATION

<b>Purdue University</b>	West Lafayette, IN	May 2022
<b>Degree: Ph. D. Engineering Education</b>		GPA: 3.67
<b>Purdue University</b>	West Lafayette, IN	December 2020
<b>Degree: Master of Science in Industrial Engineering</b>		
<b>University of Michigan</b>	Ann Arbor, MI	2014
<b>Degree: B.S.E Industrial and Operations Engineering</b>		GPA: 3.066 / 4.0

## TEACHING EXPERIENCE

<b>University of Michigan, Taubman College of Architecture</b>	2023-Present
<i>Urban Technology Intermittent Lecturer</i>	
<ul style="list-style-type: none"><li>• Taught UT 210: Listening: Design Ethnography Methods, a 2-credit undergraduate course at the University of Michigan, Taubman College - Urban Technology in Winter 2023.</li><li>• Developed course objectives focused on exploring Design Research methodologies associated with Urban Technology to translate human experiences and needs into insights and design principles.</li><li>• Created a comprehensive toolkit for students, covering Ethnographic Research Preparation, Data Collection, and Data Synthesis and Reporting.</li><li>• Facilitated course activities to help students develop and establish their personal and professional identities in Urban Technology.</li><li>• Led course discussions on relevant literature and media, promoting engagement in Desk Research.</li><li>• Conducted thorough reviews and evaluations of students' Desk Research through a Peer Review process.</li><li>• Guided students in conducting interviews with their classmates as part of a Practicum, emphasizing qualitative Design Research and Design Ethnography.</li><li>• Supervised and supported students in analyzing the collected interview data and deriving meaningful insights.</li><li>• Evaluated students' final presentations, where they showcased their unique perspectives on the in-class interviews and their implications for Urban Technology.</li><li>• Communicated with students via email and office hours to provide guidance, address inquiries, and offer feedback throughout the course.</li></ul>	
<b>Detroit Historical Museum, 1967 Perspectives Project</b>	2017 – 2021
<i>Lead Instructor for Detroit Design 2067: Detroit MI</i>	
<ul style="list-style-type: none"><li>• Developed curricula for a week-long immersion program for HS Juniors and Seniors</li><li>• Conducted research on Detroit History and developed curricula blending historical perspectives with design thinking</li><li>• Coordinated with various museum and community stakeholders to book events and activities for students</li><li>• Managed an informal learning space for 12 high school students</li></ul>	
<b>Purdue University, Multicultural Engineering Programs</b>	Fall 2017 – Summer 2019
<i>Instructor for Multicultural Engineering Program Seminar: West, Lafayette, IN</i>	
<ul style="list-style-type: none"><li>• Developed curricula for Cultural Hackathon Co-Curricular Experiences</li><li>• Assigned and reviewed student reflections</li><li>• Lead various class sessions around design identity and expectations</li><li>• Managed a classroom of 35 students for two semesters</li></ul>	

# Dr. Chanel Beebe

---

ChanelBeebe.com  
chanel@beebearts.com

## INDUSTRY EXPERIENCE

---

### **Ford Motor Company, D-Ford**

*November 2021-June 2023*

#### *Design Research Lead: Dearborn, MI*

- Took charge of developing and managing research budgets to ensure efficient allocation of resources.
- Empowered and motivated a team of 6 engineers, designers, and business leads through effective leadership, fostering alignment and inspiration.
- Crafted and executed comprehensive research plans, investigating delivery strategies, bonding activities, home charging, and smart home devices.
- Planned and orchestrated community engagement events, overseeing ideation, logistics, and facilitation to ensure successful outcomes.
- Interviewed participants, coded data, and generated valuable insights for multiple concurrent research projects.
- Created and implemented impactful surveys to gather valuable feedback from customers and internal stakeholders.
- Coordinated and supervised focus group interviews, ensuring accurate data analysis and synthesis.
- Developed research protocols, screeners, and surveys for interviews with internal and external stakeholders, optimizing engagement with customers.
- Managed recruitment processes and fostered strong relationships with third-party recruiting companies.
- Effectively communicated project plans to senior leadership, incorporating their feedback into research planning.
- Delegated tasks, provided support for research milestones, and collaborated closely with contractors and research support.
- Synthesized and presented qualitative and quantitative research findings, driving business growth and inspiring concept generation.
- Collaborated with the DEI Pod and design team to develop inclusive recruitment strategies and establish benchmarking practices.
- Successfully onboarded new designers and provided support for archetype and stimulus development.

### **Greater Good Studio, Research Firm**

*April 2021-November 2021*

#### *Research Design Lead: Chicago, Illinois*

- Formulated a comprehensive Research Plan to diligently investigate and uncover barriers to homeownership specifically affecting black and brown populations in Wisconsin.
- Conducted 20 dynamic and insightful virtual research interviews with black and brown homeowners throughout the entire state of Wisconsin.
- Championed the development and execution of four impactful community brainstorming and research events, fostering collaboration and co-creation of innovative solutions to address homeownership barriers statewide.
- Meticulously coded and synthesized extensive research findings and community conversations, culminating in the formulation of robust design principles aimed at overcoming barriers to homeownership.
- Collaborated seamlessly with a highly skilled internal team of 4 professionals, effectively leveraging their expertise, and engaged with an esteemed external board consisting of 15 state and local professionals to further enhance the research outcomes.

### **Purdue University, Black Cultural Center**

*Fall 2017 – Summer 2019*

#### *Scholar in Residence for Black Thought Collective: West, Lafayette, IN*

- Pioneered the design of dynamic curricula catering to undergraduate students, enabling them to explore and uncover gentrification patterns prevalent across cities within the African Diaspora.
- Skillfully facilitated weekly discussions centered around personal experiences of trauma, creating a safe and supportive environment for students to engage in meaningful dialogue.
- Proactively invited distinguished guest speakers specializing in Urban Planning and Ethnography, equipping students with valuable insights and knowledge crucial for their research project.
- Expertly guided students throughout the entire data collection, analysis, and publication process, ensuring their understanding and mastery of each step.
- Effectively taught and demonstrated the qualitative research process, equipping students with essential research skills and methodologies.
- Empowered students to develop 10 compelling research projects, fostering their autonomy and encouraging exploration of diverse topics.

# Dr. Chanel Beebe

---

ChanelBeebe.com

chanel@beebearts.com

- Formulated and implemented programming specifically tailored to address the needs and experiences of black students, promoting inclusivity and relevance.
- Efficiently managed the publication of student findings across diverse platforms, including esteemed journals and symposiums, effectively showcasing their valuable contributions to the field.

## **National Association of Multicultural Engineering Programs,** *Purdue University*

*Spring 2017 – Summer 2018*

*Thought Leader for Cultural Hackathon: West, Lafayette, IN*

- Engineered a groundbreaking professional development intervention, providing engineering students with unparalleled opportunities to engage with corporate representatives on community-led projects, fostering invaluable collaboration and experiential learning.
- Formulated and implemented highly impactful programming, engaging over 200 students and cultivating partnerships with 20 community organizations, amplifying the reach and impact of the initiatives.
- Initiated and executed a pilot study targeting High School seniors, exploring the potential of addressing social problems through the application of the Engineering design process, yielding valuable insights for future implementation.
- Meticulously organized the needs of community partners and students into a comprehensive semester-long course, facilitating meaningful collaboration between students and community stakeholders to devise innovative solutions to pressing community issues.
- Designed and executed rigorous research, employing surveys and interviews to delve into the experiences of community partners and evaluate the design prowess of students, generating valuable data to inform program improvements and drive impactful outcomes.

## **Purdue University,** *Mechanical Engineering, : TECH-AIDE Grant*

*Fall 2016 – Fall 2018*

*Research Lead: West, Lafayette, IN*

- Spearheaded the design of an innovative and comprehensive three-phase qualitative study, aimed at deeply understanding the values, norms, expectations, and experiences of African Americans within the College of Engineering.
- Conducted a robust research initiative, facilitating 12 engaging focus groups and conducting 25 insightful one-on-one interviews, effectively capturing the perspectives and insights of 54 African American students in the field of Engineering.
- Collaborated extensively with multiple University Departments and Centers, forging valuable partnerships to implement impactful campus climate change initiatives through research-driven strategies and programming.

## **Purdue University,** *FACELab*

*Spring/Summer 2015*

*Graduate Research Assistant: West, Lafayette, IN*

- Devised and executed an innovative curriculum for four highly successful 9-day Everyday Engineering Camps, immersing 9 to 17-year-olds in a comprehensive design process to tackle real-world problems within their immediate communities, fostering their creativity and problem-solving abilities.
- Pioneered the development of the highly acclaimed Make an Engineer Activity, a hands-on experience where participants construct a model of an engineer utilizing their personal interests and skills to devise innovative solutions for global engineering challenges, igniting their passion for engineering and empowering them as problem solvers.
- Conducted extensive research on the profound impact of informal engineering experiences and activities, systematically exploring the transformative effects on individuals and their engagement with the engineering field, thereby generating valuable insights and contributing to the body of knowledge in the research community.
- Demonstrated exceptional prowess as a researcher, applying comprehensive methodologies and employing rigorous data collection and analysis techniques to draw meaningful conclusions and implications from the research findings.

## **University of Michigan,** *Engineering Explorer's Grant*

*Fall 2014*

*Research Assistant: Ann Arbor Michigan*

- Championed groundbreaking research on the experiences of underrepresented and international students within First Year Engineering teams, shedding light on crucial aspects and challenges faced by these student populations.

# Dr. Chanel Beebe

---

ChanelBeebe.com  
chanel@beebearts.com

- Devised and implemented a meticulously crafted survey, specifically designed to quantitatively measure and assess student experiences in teams, leveraging established group dynamics frameworks to provide comprehensive insights and data-driven analysis.
- Utilized advanced research methodologies to gather and analyze data, unearthing nuanced findings that contributed to a deeper understanding of the dynamics within First Year Engineering teams and the unique experiences of underrepresented and international students.
- Applied a proactive and systematic approach to research, ensuring the survey instrument was valid, reliable, and aligned with the objectives of the study, thereby ensuring the accuracy and rigor of the research outcomes.
- Effectively synthesized and interpreted the survey data, uncovering patterns and trends, and translating them into actionable recommendations to enhance the inclusivity and effectiveness of First Year Engineering teams for underrepresented and international students.

**Duke University**, *Mary Lou Williams Center for Black Culture*  
*Graduate Research Assistant: Durham, NC*

Fall 2014

- Pioneered and facilitated dynamic and insightful informal focus groups, playing a crucial role in gaining a comprehensive understanding of the African American student experience within the university setting.
- Utilized astute observation and active listening skills to elicit valuable insights from participants, allowing for a deep exploration of the unique challenges, perspectives, and aspirations of African American students.
- Formulated a comprehensive outline detailing the specific needs and requirements of African American students, effectively capturing their diverse experiences and providing a roadmap for addressing key areas of improvement.
- Took the initiative to spearhead a university-wide effort, driving the collection of vital data on African American student satisfaction, thereby promoting a data-driven approach to identify areas of success and opportunities for enhancement.
- Effectively collaborated with various stakeholders across the university, rallying support and participation in the data collection initiative, fostering a collaborative and inclusive approach to understanding and improving the experiences of African American students.

**University of Michigan**, *Engaged Advising Learning Grant*  
*Project Coordinator Ann Arbor, MI*

2013-2014

- Pioneered insightful interviews and focus groups to gain a profound understanding of the existing dynamics within advisor-student relationships, unraveling key insights that enhance the quality of these crucial connections.
- Conducted impactful research centered on student engagement within the classroom, shedding light on factors that drive student participation, motivation, and learning outcomes.
- Formulated a comprehensive rubric, empowering faculty members with a powerful tool to evaluate and quantify student performance accurately. This rubric enables a holistic assessment, promoting fairness and objectivity in the evaluation process.
- Collaborated closely with advisors, providing them with a clearer and more detailed picture of student performance through the integration of multiple data points and perspectives. This valuable support fosters better-informed decision-making and personalized guidance for students.

**The Boeing Company**, *Consumer Aviation Services Lean Enterprises*  
*Industrial Engineering Intern: Renton, WA*

Summer 2013

- Completed Shingo training and developed a better understanding of perfected business practices
- Designed and developed a visual management system for managing team projects that were eventually implemented for over 200 employees
- Constructed Values Stream Mapping of change request process and completed root cause analysis to eliminate security issues
- Conducted time studies on Kent Distribution Center Receiving Process
- Facilitated and developed an accelerated improvement workshop that decreased receiving time by 50%

# Dr. Chanel Beebe

---

ChanelBeebe.com  
chanel@beebearts.com

**Dow Chemical Company**, *Hydrocarbons Improvement Team*  
*Supply Chain Intern: Houston, TX*

Summer 2012

- Facilitated informational discussions with international teams to gather the needs of stakeholders and an informational dashboard
- Reevaluated key corporate processes to streamline workflow by building decision trees and flow charts
- Built a balance sheet to manage \$500 million in Canadian Ethylene sales

**Wal-Mart Stores Inc.**, *Information Systems Department*  
*International Department Intern: Bentonville, AR*

Summer 2011

- Developed strategies to integrate a recently acquired company successfully
- Oversaw budgets of \$200 million+
- Interfaced with international groups

## SOFTWARE, PROGRAMMING, TECHNICAL SKILLS

---

- Expert user of remote communication and team mining software, including Zoom, Google Suites, Microsoft Teams, and Outlook
- Expert user of Microsoft Office Suite including Excel, PowerPoint, Word, and Publishers
- Expert Recruiting Software Skills
  - User Zoom, D-Scout
- Expert Qualitative Data Analysis Skills
  - Expert User of Microsoft Access, NVIVO, Miro and Bluescape
- Proficient Quantitative Data Analysis Skills
  - Qualtrics, SurveyMonkey, Google Forms
- Proficient Team management skills, including Kanban usage and productivity software
  - including Asana, Trello, Todoist, Calendly, and more

## PROGRAM CERTIFICATIONS

---

- Burke Institute Certification for Research Facilitation, 2022
- Design Thinking Certification, Ford Motor Company, 2022
- Center for Compassionate Systems Awareness, 2021
- Advanced Graduate Teaching Certificate, Purdue University, Center for Instructional Excellence, 2019
- Different Lenses Workshop Series Completion, Purdue University Center for Intercultural Learning, 2019
- Applied Management Principles Program Graduate, Purdue University Krannert School of Business, 2019

## AWARDS AND HONORS

---

- Black Trailblazers in Engineering Fellows (Purdue University, 2021)
- Humanity in Action Detroit Fellow (2019)
- Dissertation Institute Fellow (University of Houston, 2018)
- Ford Foundation Pre-Doctoral Fellowship (2018-2021)
- Leadership in Action Award (Purdue Butler Center – 2017)
- Spirit of Martin Luther King Jr. Leadership Award (College of Engineering – 2014)
- Outstanding Female on Campus (Alpha Phi Alpha Fraternity Incorporated – 2013)
- New Student Achievement Award (College of Engineering - 2009)
- Gates Millennium Scholarship (Bill Gates Foundation-2009)
- Rogel Match Scholarship (U of M-2009)

# Dr. Chanel Beebe

---

ChanelBeebe.com  
chanel@beebearts.com

## SERVICE AND LEADERSHIP

---

**Detroit Soup:** Artist Chair (April 2022-December 2022)

### **Purdue University**

- Purdue Black Cultural Center: Black Thought Collective, Scholar in Residence (2017-2019)
- Engineering Education Graduate Student Association, Secretary (2017-2018), President (2017-2018)
- Mentoring at Purdue Program, Peer Mentor (2017-2018)
- Purdue Black Cultural Center: Haraka Writers, Spoken Word Poet, (2015-2017)
- National Society of Black Engineers, Member (2015-2018)
- Black Graduate Student Association, Member (2015-2018)

### **University of Michigan**

- National Society of Black Engineers: Vice President (2012-2013), Finance Chair (2011-2012)
- Office of Academic Multicultural Initiatives: Academic Success Partner to 6 protégés (Present)
- Center for Educational Outreach- Project Inspire: Student Speaker (2009-Present)
- American Association of University Women, National Student Advisory Council (2010-2011)
- Gates Millennium Scholarship (Bill Gates Foundation-2009)
- Rogel Match Scholarship (U of M-2009)

## JOURNAL PUBLICATIONS

---

- In Preparation: Bednar, D., **Beebe, C.** (2021). Socially Engaged Energy Justice and Design: A practical framework for more Inclusive Access, *Frontiers Energy*
- Holly, J., Hira, A., **Beebe, C.**, Carter, K. (2021). Who gets to engineer?, Countering the Mythology of Inclusion and Wellness in Schooling
- Secules, McCall, Mejia, **Beebe**, Masters, Sanchez-Peña, Svyantek (2021). Positionality Practices and Dimensions of Impact on Equity Research: A Collaborative Inquiry and Call to the Community, *Journal of Engineering Education* (In Press).
- **Beebe, C (2020)**. Emergence and Compassion: A Reflection on Interpersonal Priorities Strategies Within Collaborative Settings, *Purdue Journal of Service Learning*, West Lafayette, IN.
- **Beebe, C.** (2018). They Will Ask You. *Murmurations*, 1(1), 5-7.  
<https://doi.org/https://doi.org/10.31946/meee.v1.i1.19>

## CONFERENCE PUBLICATIONS

---

- **Beebe, M. C.**, & Holly Jr, M. J. Researching Diversity from Multiple, Diverse Perspectives.
- Hira, A., Beebe, C., Maxey, K. R., & Hynes, M. (2018). "But, What Do You Want Me to Teach?": Best Practices for Teaching in Educational Makerspaces (RTP)," In American Society for Engineering Education Annual Conference.
- Ehsan, H., **Beebe, C.**, Cardella, M. (2017). Promoting Computational Thinking in Children Using Apps, ASEE, Columbus, OH.
- **Beebe, C.**, Hynes, M. (2017). Youth Ages 9-15 Perceptions of Mechanical Engineering by Race and Gender, ASEE, Columbus, OH.
- Holly, J., Joslyn, C., Hira, A., Hynes, M., & **Beebe, C.** (2016). What do you like to do? Exploring pre-college students' career aspirations and perceptions of engineering (Work in progress). In ASEE 2016 Annual Conference. New Orleans, LA.
- **Beebe, C.**, Sarwar, U., Jubelt, N., Hira, A., & Hynes, M. (2016). MAKER: A Game to Make Engineering. In ASEE 2016 Annual Conference. New Orleans, LA.

## INVITED PRESENTATIONS

---

- **Beebe, C.**, "Social Problem Solving: The Gnosis Method," Purdue Biology Education Virtual Seminar Series: Equality, Social Justice, and Praxis in STEM Learning Spaces, Virtual, March 2021
- **Beebe, C.**, "History in the Making: Using Design to Create the World You want to See," Mississippi State University Black History Month Program, Virtual, February 2021
- **Beebe, C.**, "Intent vs. Impact: Addressing Micro Aggressions," Cal-Poly San Luis College of Engineering Lecture Series, Virtual, December 2020 – May 2021



# Dr. Chanel Beebe

---

ChanelBeebe.com  
chanel@beebearts.com

- **Beebe, C.**, "Expanding Cultures Part II: Beyond Intersectionality" Women in Engineering ProActive Network, Virtual, October 2019
- **Beebe, C.**, "Expanding Cultures: How where I come from informs where I am going and how I will get there" Women in Engineering ProActive Network, Virtual, August 2019

## CONFERENCE PRESENTATIONS

---

- **Beebe, C.**, Holly, Tolbert, Colquitt. "Do You See Me?: Hypervisible Invisibility #EngineeringWhileBlack", American Society of Engineering Education, Virtual, July 2020.
- **Beebe, C.**, "Service-learning from the perspective of Community Partners" Poster and Exhibition. Purdue Engagement and Service-Learning Summit, West Lafayette, IN, February 2020.
- **Beebe, C.**, "Researching Socially Engaged Design: Community Partner Narratives of Social Change and Agency Building" Ford Foundation Fellow Annual Conference, San Juan, Puerto Rico, October 2019.
- **Beebe, C.**, "Storytelling and Utopia as Resistance to Marginalization of African American Engineers at a PWI" Collaborative Network for Engineering and Computing Diversity, Washington DC, April 2019.
- **Beebe, C.**, "Cultural Hackathon: Development and Considerations" Collaborative Network for Engineering and Computing Diversity, Washington DC, April 2019.
- **Beebe, C.**, "Inclusive Community-Engaged Design" 45<sup>th</sup> Annual National Society of Black Engineers National Convention, Detroit, MI, April 2019.
- **Beebe, C.**, "Experiences and Learning of Community Partners in Community Engaged Design Settings" 2018 Conference of Ford Fellows: Academic Exchange Session, San Jose, CA, September 2018.
- **Beebe, C.**, "Youth Ages 9-15 Perceptions of Mechanical Engineering by Race and Gender." ASEE 2017 Annual Conference, Columbus, OH, June 29, 2017.
- **Beebe, C.**, "Promoting Computational Thinking in Children Using Apps." ASEE 2017 Annual Conference, Columbus, OH, June 29, 2017.
- **Beebe, C.**, "What do you like to do? Exploring pre-college students' career aspirations and perceptions of engineering." ASEE 2016 Annual Conference, New Orleans, LA, June 24, 2016.
- **Beebe, C.**, "MAKER: A Game to Make Engineering." Poster and Exhibition, ASEE 2016 Annual Conference, New Orleans, LA, June 24, 2016.

## PERSONAL PUBLICATIONS

---

- Beebe, Chanel (2020) Views from the Inside, Beebe Arts LLC, Detroit, MI
- Beebe, Chanel (2019) Proof, Beebe Arts LLC, Detroit, MI
- Beebe, Chanel (2017) Fractal, Beebe Arts LLC, Detroit, MI
- Beebe, Chanel (2017) Now, Go!, Beebe Arts LLC, Detroit, MI
- Beebe, Chanel (2016) Reveal, Beebe Arts & Ahmad Barber Photography, Detroit, MI
- Beebe, Chanel (2015) Now & Then, Beebe Arts, Detroit, MI