

# Tee Chuanromanee

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## EMPLOYMENT HISTORY

### Human Factors Engineer | 03/2023 – Present

Southwest Airlines | Dallas, TX

- Analyze flight data and crew reports to understand causes and contributing factors to flight incidents
- Design and execute Human Factors research studies, develop and validate metrics, and conduct comprehensive data analyses
- Present actionable research insights to stakeholders to drive procedure changes
- Develop business case to integrate virtual reality into pilot training curriculum

### Research Assistant | 02/2023 – Present

University of Michigan, School of Information | Remote

- Design and conduct asynchronous remote focus groups with gender affirming surgeons and transgender participants
- Create and disseminate research recruitment materials
- Work with an interdisciplinary team to bridge together findings from human-computer interaction, medicine, and gender studies

### Graduate Research Assistant | 08/2018 – 05/2023

University of Notre Dame | Notre Dame, IN

- Conducted and analyzed semi-structured interviews using open and axial coding
- Created and evaluated paper and digital prototypes
- Designed and implemented Mechanical Turk experiments to evaluate cognitive biases in visualizations
- Design and conduct user studies and participatory design workshops
- Oversee students and lead professional development meetings
- Built a mobile breathing visualizations tool using D3.js and performed usability testing

### UX Research Intern | 06/2021 – 08/2021

Facebook | Remote

- Investigated content creators' pain points in using Live Breaks feature
- Conducted interviews with users and non-users of Live Breaks
- Presented findings to stakeholders
- Participated in internal hackathon
- Improved internal documentation

### Graduate Teaching Assistant | 08/2018 – 05/2019

University of Notre Dame | Notre Dame, IN

- Graded Programming Paradigms daily assignments, in-class exercises, and projects
- Held regular office hours for students
- Acted as a liason between professor and students

### Undergraduate Research Assistant | 06/2017 – 08/2018

Kettering University | Flint, MI

- Wrote and implemented image analysis techniques including Elliptical Fourier Descriptors and landmark analysis in Matlab
- Wrote and utilized data analysis scripts including principal component analysis
- Wrote and updated technical documentation for users and developers
- Created and tested a graphical user interface

#### **Peer Tutor | 10/2016 – 06/2018**

Kettering University | Flint, MI

- Supported students' academic progress through individual and group tutoring
- Focused on computer science subjects as well as calculus, chemistry, physics, and computer engineering
- Obtained Level 2 Tutor certification from College Reading and Learning Association

#### **Software Engineer Co-op | 01/2016 – 03/2017**

Robert Bosch, LLC | Plymouth, MI

- Wrote and supported customer and internal scripts in Python, Perl, and VBA
- Tested embedded software modules in ASCET Database using code coverage analysis
- Implemented CERT analysis system for project-wide security assessment

#### **Test and Validation Co-op | 07/2015 – 09/2015**

Robert Bosch, LLC | Novi, MI

- Identified and documented bugs in automotive infotainment systems
- Validated bug fixes
- Tested navigation systems for customer (General Motors) both in car and on bench
- Went on testing trips with customer to locate and verify bugs
- Worked with customers to ensure that bugs were resolved quickly
- Wrote and improved technical documentation

## **EDUCATION**

#### **PhD: Computer Science | 08/2018 – 03/2023**

University of Notre Dame | Notre Dame, IN

Overall GPA: 3.91

Thesis: Designing the Trans Experience: Technology and Common Gender Transition Narratives

Research Area: Human-Computer Interaction

Advisor: Ronald Metoyer

#### **MS: Computer Science | 08/2018 – 12/2021**

University of Notre Dame | Notre Dame, IN

Overall GPA: 3.91

Research Area: Human-Computer Interaction

Advisor: Ronald Metoyer

#### **BSCS: Computer Science, Economics Minor | 10/2015 – 06/2018**

Kettering University | Flint, MI

Overall GPA: 3.95, Dean's List

Summa Cum Laude

Upsilon Pi Epsilon Computer Science Honor Society, Member

Thesis: *Diagnostic Assistance Software for Mental Healthcare Providers*, Pass With Distinction

## Mechanical Engineering Major | 09/2014 – 05/2015

Milwaukee School of Engineering | Milwaukee, WI

Overall GPA: 3.91

Dean's List with High Honors

## SKILLS

### Programming Languages

Python, JavaScript, C, Java, MATLAB, SQL

### User Research Methods and Tools

Interviews, Focus Groups, Contextual Inquiry, Remote Usability Studies, Observations, Participatory Design, Mechanical Turk, Maze, Survey Design, Qualtrics

### Interface Design

D3.js, Figma, Zeplin, Adobe XD

### Data Analysis

Open and Axial Coding, Affinity Diagramming, ANOVA, SPSS, Atlas.TI, Saturate

### Website Development

HTML, CSS, PHP, JavaScript, Node.js, Vue.js, MySQL, Bootstrap, Django, Drupal, Wordpress

### Teaching and Tutoring

*Computer Science*: Computing and Algorithms I-III, Programming Paradigms, Operating Systems, Web Software, Functional Languages

*Computer Engineering*: Digital Systems, Microcomputers I-II

*Mathematics*: Calculus I-III, Differential Equations

## CONFERENCE AND JOURNAL PAPERS

**Chuanromanee, T.**, Haimson, O., & Metoyer, R. Using Discord in the Community, and Other Means of Online Collective Trans Care: Decision-making and Storytelling in Online Transgender Health Support Groups. Submitted.

Madzia, J., **Chuanromanee, T.**, Blasdel, G., DeGuia, A., Byrnes, M., Shakir, N., Lane, M., & Haimson, O. 2023. Gender-Affirming Surgeons' Attitudes toward Social Media Communication with Patients. *Bulletin of Applied Transgender Studies*, 2(3-4). pp. 151-174.

**Chuanromanee, T.**, Metoyer, R. Understanding Gender Transition Tracking Habits and Technology. 2023. *Proceedings of 2023 CHI Conference on Human Factors in Computing Systems*. Pp. 1-16.

**Chuanromanee, T.** & Metoyer, R. 2022. A Crowdsourced Exploration of the Effects of Visualization on Confirmation Bias in Decision-Making in Non-Experts. 2022 IEEE Symposium on Visual Languages and Human-Centric Computing (VL/HCC). IEEE, 2022.

**Chuanromanee, T.** & Metoyer, R. 2021. Transgender People's Technology Needs to Support Health and Transition. *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems*. pp. 1-13.

**Chuanromanee, T.** & Metoyer, R. 2020. Evaluation and Comparison of Four Mobile Breathing Training Visualizations. 2020 International Conference on Healthcare Informatics. pp. 1-12.

Metoyer, R., **Chuanromanee, T.**, Girgis, G. M., Zhi, Q., & Kinyon, E. 2020. Supporting Storytelling with Evidence in Holistic Review Processes: A Participatory Design Approach. *Proceedings of the ACM on Human-Computer Interaction*, 4(1).

**Chuanromanee, T.**, Cohen, J., & Ryan, G. 2019. Morphological Analysis of Size and Shape (MASS): An integrative software program for morphometric analyses of leaves. Applications in Plant Sciences, e11288.

## EXTENDED ABSTRACTS

**Chuanromanee, T.**, & Metoyer, R. 2022. Designing the Trans Experience: Technology and Common Gender Transition Narratives. Designing Interactive Systems Conference. pp. 1-3.

Collective, C. J., Molina León, G., Kirabo, L., Wong-Villacres, M., Karusala, N., Kumar, N., Bidwell, N., Reynolds-Cuéllar, P., Protim Borah, P., Garg, R., Oswal, S.K., **Chuanromanee, T.**, & Sharma, V. 2021. Following the Trail of Citational Justice: Critically Examining Knowledge Production in HCI. In Companion Publication of the 2021 Conference on Computer Supported Cooperative Work and Social Computing. pp. 360-363.

DeVito, M.A., Lustig, C., Simpson, E., Allison, K.R., **Chuanromanee, T.**, Spiel, K., Ko, A.J., Rode, J., Dym, B., Muller, M., Scheuerman, M., & Walker, A. 2021. SIG: Queer in HCI: Strengthening the Community of LGBTQIA+ Researchers and Research. In Extended Abstracts of the 2021 CHI Conference on Human Factors in Computing Systems.

## ORAL PRESENTATIONS

Understanding Gender Transition Tracking Habits and Technology. Oral presentation at ACM CHI Conference on Human Factors in Computing Systems, Hamburg, Germany, April 24, 2023.

Crowdsourced Exploration of the Effects of Visualization on Confirmation Bias in Decision-Making in Non-Experts. Oral presentation at 2022 IEEE Symposium on Visual Languages and Human-Centric Computing (VL/HCC), Rome, Italy, September 12, 2022.

Transgender People's Technology Needs to Support Health and Transition. Oral presentation at ACM CHI Conference on Human Factors in Computing Systems, Virtual, May 10 & 11, 2021.

Evaluation and Comparison of Four Mobile Breathing Training Visualizations. Oral presentation at IEEE International Conference on Healthcare Informatics (ICHI), Virtual, December 2, 2020.

Supporting Storytelling with Evidence in Holistic Review Processes: A Participatory Design Approach. Oral presentation at Computer Supported Cooperative Work and Social Computing (CSCW), Virtual, October 17, 2020

MASS: a tool for Morphological Analysis of Size and Shape of leaves. Oral presentation at the Michigan Academy of Science, Arts, and Letters, Central Michigan University, Mount Pleasant, MI, March 9, 2018

Quantitative Analysis of Leaf Shape. Oral presentation at the Kettering Department of Physics Seminar Series, Kettering University, Flint, MI, August 18, 2017.

## POSTER PRESENTATIONS

Supporting Storytelling with Evidence in Holistic Review Processes: A Participatory Design Approach. Poster presentation at the Prospective PhD Student Visit Poster Session, University of Notre Dame, Notre Dame, IN, March 5, 2021.

Evaluation and Comparison of Usability of Four Mobile Breathing Training Visualizations. Poster presentation at the CRA URMD Grad Cohort Workshop, Computing Research Association, Waikoloa, HI, March 22, 2019.

MASS: a tool for Morphological Analysis of Size and Shape of leaves. Poster presentation at Kettering University Homecoming Poster Session, Kettering University, Flint, MI, May 17, 2018.

Quantitative Analysis of Leaf Shape. Poster presentation at the Research Experience for Undergraduates Poster Session, Kettering University, Kettering University, Flint, MI, August 17, 2017.

## INVITED TALKS AND PANELS

Exploring Career Opportunities in Human-Computer Interaction. Invited talk at Northeastern University, Virtual, April 11, 2023.

Applied Trans Studies x Digital Studies. Center for Applied Transgender Studies. Invited Panelist at Applied Trans Tech Studies Symposium, Virtual, January 21, 2022.

Being the Queer Kid: Navigating Disclosure in STEM. Invited talk at Kettering University Diversity Week, Virtual, November 16, 2020.

## MEDIA APPEARANCES

These Deepfake Voices Can Help Trans Gamers. September 21, 2021.  
<https://www.wired.com/story/deepfake-voices-help-trans-gamers/>

## HONORS AND AWARDS

CSE Outstanding Research Assistant Award (Honorable Mention) | University of Notre Dame | 2023  
Graduate School Professional Development Award | University of Notre Dame | 2023  
Conference Presentation Grant | University of Notre Dame Graduate Student Government | 2023  
Graduate Cohort for IDEALS Travel Grant | Computing Research Association | 2022  
Jane Street Scholar | Tapia Conference | 2021  
Flatiron Health Tapia Scholar | Tapia Conference | 2020  
Leadership Advancing Socially Engaged Research | University of Notre Dame | 2020 – 2021  
Tapia 2019 Travel Grant | Access Computing | 2019  
CRA URMD Travel Grant | Computing Research Association | 2019, 2020  
GEM Associate Fellow | The National GEM Consortium | 2019 – 2020  
James and Eileen Simon Graduate Fellowship | University of Notre Dame | 2018 – 2019  
Outstanding Thesis Award | Kettering University | 2018  
President's Medal | Kettering University | 2018  
Bio REU Travel Grant | Rocky Mountain Biological Laboratory | 2018  
Donald Miles Memorial Scholarship | Kettering University | 2017 – 2018  
Kettering Merit Scholarship | Kettering University | 2015 – 2018  
Presidential Scholarship (Full Tuition) | Milwaukee School of Engineering | 2014 – 2015  
Siemens Merit Scholarship | Siemens | 2014 – 2018  
Discus Awards Honorable Mention | Discus Awards | 2013

## SERVICE

Student Volunteer | ACM CHI | 2021 - 2022  
Co-Organizer | Trans/Queer in HCI Mentoring Program | 2021-present  
Board Member | The LGBTQ Center | 2021-2023  
External Paper Reviewer | IEEE ISEC TPC 2019, 2021; ACM CSCW **2021**, 2022; CHI **2023**; CHI PLAY **2022**, DIS 2023 | 2019-present (bold = special recognition)  
Graduate Student Board Member | University of Notre Dame | 2021-2022  
External Poster Reviewer | ACM CSCW | 2020  
Outreach and Solidarity Chair | Queer in HCI Special Interest Group | 2020 – 2021  
Blog Editor and Board Member | Irish 4 Reproductive Health | 2020 – 2022  
Volunteer | The LGBTQ Center | 2018 – 2023  
Treasurer | Amazing Grace Counseling Outreach | 2012 – 2019

## PROFESSIONAL DEVELOPMENT AND CERTIFICATIONS

URMD Grad Cohort Participant | Computing Research Association | 2019, 2020

Striving for Excellence in College and University Teaching | University of Notre Dame Kaneb Center for Teaching and Learning | 2018

Responsible Conduct of Research | CITI Program | 2017, 2021

Level 2 Certified Tutor | College Reading & Learning Association | 2017

## PROFESSIONAL MEMBERSHIPS

Member | Association for Computing Machinery

Member | ACM SIGCHI

Member | Upsilon Pi Epsilon