# Tya Chuanromanee

### 5625 Osage Lake Dr Apt #2B, Mishawaka, IN 46545

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### Education

• University of Notre Dame, Notre Dame, IN

Expected May 2023

- o PhD: Computer Science
- o GPA: 3.909
- Human-Computer Interaction
- o Advisor: Ronald Metoyer
- **Kettering University, Flint, MI**

June 2018

- o BSCS: Computer Science with Economics minor
- o GPA: 3.95, Summa Cum Laude, Dean's List
- o Upsilon Pi Epsilon Computer Science Honor Society, Member
- o Thesis: Diagnostic Assistance Software for Mental Healthcare Providers, Pass With Distinction
- Milwaukee School of Engineering, Milwaukee, WI

September 2014-May 2015

- Mechanical Engineering major
- o GPA: 3.91, Dean's List with High Honors

# Experience

### **Founder**

Transverse, Mishawaka, IN

April 2019-present

- Design, develop, and test mobile application for mental health and dysphoria management for transgender individuals
- Lead meetings and coordinate organizational operations
- Apply for grants and funding

#### **Graduate Research Assistant**

University of Notre Dame, Notre Dame, IN

August 2018-present

- Conduct and analyze semi-structured interviews to inform design of a mobile application
- Create and evaluate paper and digital prototypes
- Design and implement Mechanical Turk experiments to evaluate cognitive biases
- Design and conduct user studies and participatory design workshops
- Built a mobile breathing visualizations app and performed usability testing to evaluate its effectiveness

#### **Undergraduate Research Assistant**

**Kettering University, Flint, MI** 

June 2017-August 2018

- Wrote and implemented image analysis techniques including Elliptical Fourier Descriptors and landmark analysis
- Write data analysis scripts including principal component analysis using Matlab
- Created and tested graphical user interface

#### **Peer Tutor**

## Kettering University, Flint, MI

October 2016-June 2018

- Supported students' academic progress through tutoring in both individual and group settings
- Obtained Level 2 Tutor certification from College Reading and Learning Association

#### **Software Engineer Co-op**

Robert Bosch, LLC, Plymouth, MI

January 2016-March 2017

- 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

- Identified and documented bugs in automotive infotainment systems
- Validated bug fixes
- Worked with customer on multiple testing trips to locate and verify bugs
- Wrote and improved technical documentation

# Related Experience

### **Blog Editor**

# Irish 4 Reproductive Health, South Bend, IN

December 2018-present

- Maintain organization website, keep blog updated, and recruit content contributors
- Attend regular board meetings and assist in event organization

## Receptionist

# The LGBTQ Center, South Bend, IN

December 2018-present

- Greet walk-in visitors, answer phone calls, and managed community library
- Perform data entry for diversity training sessions

#### **Treasurer**

Amazing Grace Counseling Outreach, Ann Arbor, MI

May 2012-September 2019

- Keep records of finances for organization and prepare quarterly and annual financial reports for organization
- Manage organization website

# Skills

- Programming Languages: Python, C, Java, MATLAB, SQL, Haskell, Perl, VBA
- Machine Learning: RNN, CNN, Keras, Theano; Sampling and training data; Network architecture
- Website Development: HTML, CSS, PHP, JavaScript, MySQL, Bootstrap, Django, Drupal, Wordpress
- **Software:** Atlas.TI, Figma, Zeplin, Android Studio, Windows and Linux operating systems, Git, Microsoft Office Suite, MATLAB App Designer, SolidWorks, Adobe Photoshop, Intuit QuickBooks
- Data Collection and Analysis: Open Coding, Affinity Diagramming, Participatory Design
- Teaching and Tutoring: Computer Science and Engineering: Computing and Algorithms I-III, Programming Paradigms, Operating Systems, Web Software, Functional Languages, Digital Systems, Microcomputers I-II; Mathematics: Calculus I-III, Differential Equations

### **Selected Publications**

- Chuanromanee, T. & Metoyer, R. 2021. Understanding Transgender People's Technology Needs to Support Health and Transition. In Preparation.
- 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).

### Honors and Awards

- Leadership Advancing Socially Engaged Research Fellow (2020-2021)
- GEM Associate Fellowship (2019-2020)
- James and Eileen Simon Graduate Fellowship (2018-2019)
- Outstanding Thesis Award (2018)
- President's Medal (2018)
- Kettering Merit Scholarship Award (2015-2018); Donald Miles Memorial Scholarship (2017-2018)
- Milwaukee School of Engineering Full Tuition Presidential Scholarship Award (2014-2015)
- Siemens Merit Scholarship Award (2014-2018)