# Tya Chuanromanee

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

tchuanro@nd.edu

#### Education

• University of Notre Dame, Notre Dame, IN

Expected June 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

## **Graduate Research Assistant**

University of Notre Dame, Notre Dame, IN

August 2018-present

- Conduct and analyze semi-structured interviews to inform design of a health 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 tool and performed usability testing to evaluate its effectiveness

#### **Graduate Teaching Assistant**

University of Notre Dame, Notre Dame, IN

August 2018-May 2019

- Graded and gave feedback on student homework in Programming Paradigms course
- Held regular office hours
- Advocated for students and serve as a liaison between professors and students

#### **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
- Set up and managed version control and project timeline using Git and GitHub
- Presented work at REU Symposium in Flint, MI, and at MASAL conference in Mount Pleasant, MI
- Work published in Applications in Plant Sciences

## **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

#### **Test and Validation Co-op**

Robert Bosch, LLC, Novi, MI

July 2015-September 2015

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

## Related Experience

#### **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

#### Receptionist

The LGBTQ Center, South Bend, IN

December 2018-Present

- Greet walk-in visitors and answer phone calls
- Direct guests to appropriate staff members
- Check books in and out of the community library for guests
- Perform data entry for diversity training sessions

#### Skills

- Programming Languages: Python, C, Java, MATLAB, SQL, Haskell, Perl, VBA
- Machine Learning: RNN, CNN, Keras, Theano; Sampling and training data; Network design and architecture
- Website Development: HTML, CSS, PHP, JavaScript, MySQL, Bootstrap, Django, Drupal, Wordpress
- **Software:** Atlas.TI, Saturate, Figma, 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

#### Honors and Awards

- GEM Associate Fellowship (2019-2020)
- James and Eileen Simon Graduate Fellowship (2018-2019)
- Outstanding Thesis Award (2018) \$500
- President's Medal (2018)
- Kettering Merit Scholarship Award (2015-2018); Donald Miles Memorial Scholarship (2017-2018) \$750
- Milwaukee School of Engineering Full Tuition Presidential Scholarship Award (2014-2015)
- Siemens Merit Scholarship Award (2014-2018) \$1,000/year (4 years)

## Training and Certifications

- URMD Grad Cohort 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)
- Level 2 Certified Tutor College Reading & Learning Association (2017)