Tya Chuanromanee

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EMPLOYMENT HISTORY

08/2018 - Present

Graduate Research Assistant | University of Notre Dame, Notre Dame, IN

- Design and conduct user studies and participatory design workshops
- Work with the Instutional Review Board to get studies approved
- Gather and analyze quantitative and qualitative data

08/2018 – 05/2019

Graduate Teaching Assistant | University of Notre Dame, Notre Dame, IN

- Grade Programming Paradigms daily assignments, in-class exercises, and projects
- Hold regular office hours for students
- Act as a liason between professor and students

06/2017 – 08/2018

Undergraduate Research Assistant | 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 using Matlab
- Set up and managed version control system and project timeline using Git and Github
- Wrote and updated technical documentation for users and developers

10/2016 – 06/2018

Peer Tutor | 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

01/2016 – 03/2017

Software Engineer Co-op | 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

07/2015 – 09/2015

Test and Validation Co-op | 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

08/2017 – 06/2023

University of Notre Dame | Notre Dame, IN

PhD: Computer Science

Overall GPA: 3.78

Research Area: Human-Computer Interaction

10/2015 – 06/2018

Kettering University | Flint, MI

BSCS: Computer Science, Economics Minor

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

09/2014 – 05/2015

Milwaukee School of Engineering | Milwaukee, WI

Mechanical Engineering Major

Overall GPA: 3.91, Program GPA: 4.00, Dean's List

SKILLS

- **Programming Languages:** Python, JavaScript, C, Java, MATLAB, SQL, Haskell, Perl, VBA
- **Website Development:** HTML, CSS, PHP, JavaScript (D3.JS, Vue.JS), MySQL, Bootstrap, Django, Drupal, Wordpress
- **Software:** Atlas.TI, Saturate, Windows and Linux operating systems, Git, Microsoft Office Suite, MATLAB App Designer, SolidWorks, Adobe Photoshop, Intuit QuickBooks
- **Machine Learning:** RNN, CNN, Keras, Theano; Sampling and training data; Network design and architecture
- **Data Collection and Analysis:** Open Coding, Affinity Diagramming, Participatory Design
- **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

PUBLICATIONS

Chuanromanee, T. S., Metoyer, R. M. 2019. Evaluation and Comparison of Usability of Four Mobile Breathing Training Visualizations. Submitted.

Metoyer, R. A., **Chuanromanee, T. S.,** Girgis, G. M. 2019. Storytelling with Evidence in Holistic Review. Submitted.

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

ORAL PRESENTATIONS

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

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.

HONORS AND AWARDS

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 (2017)

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

External Reviewer | IEEE ISEC TPC (2019)

LGBTQ Focus Group Member | University of Notre Dame Office of Student Affairs (2019)

Disabled Student Focus Group Member | University of Notre Dame Office of Student Affairs (2019)

Receptionist | The LGBTQ Center (2018-present)

Event Assistant | The LGBTQ Center (2018-present)

Treasurer | Amazing Grace Counseling Outreach (2012-2019)

PROFESSIONAL DEVELOPMENT AND CERTIFICATIONS

URMD Grad Cohort Participant | Computing Research Association (2019)

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)

PROFESSIONAL MEMBERSHIPS

Member | Association for Computing Machinery

Member | ACM SIGCHI

Member | Society for Applied and Industrial Mathematics

Member | Upsilon Pi Epsilon

REFERENCES AVAILABLE ON REQUEST