MINH TRAN

(520) 358-6531 | leahtran193@email.arizona.edu | Linkedin

Currently seeking a thesis Master's or PhD position in Computer Science, focusing on Computing Education

Open to internship opportunities in field of Software Engineering and Web Development/Design

EDUCATION

The University of Arizona, Tucson, AZ — *Classification: Junior*
Bachelor of Science in Computer Science — *Cumulative GPA: 3.775*
Bachelor of Art in Psychology — *Expected Graduation: December 2021*
Minor in Statistics & Data Science

RESEARCH EXPERIENCE

Undergraduate Research Assistant — *January 2021 - Present*
Department of Electrical and Computer Engineering, University of Arizona

- Dr. Jonathan Sprinkle is working on a multi-campus project on self-driving cars and connected vehicles, which aims to construct advanced models of vehicles suitable to the model-based design of cyber-physical systems and reduce traffic congestion effects by expertly controlling the velocity of vehicles that are driving in congested traffic.
- As an undergraduate research assistant in his **Compositional Systems Lab (CSL)**, I collaborate with graduate students, Post-Docs and other members of the project in coding and computing tasks that are aligned with data analysis, machine learning, data curation, and automation of data gathering to support the project.
- Further tasks include developing prototypes in Python and re-implementing code in C/C++ for speed on either embedded computers or through minicomputers such as a Raspberry Pi

Research Team Member — *September 2020 - Present*
School of Information, University of Arizona

- Work on a directed research course under The Vertically Integrated Projects Program.
- Participate in the Holodeck team, a NSF funded research instrument envisioned as a software/hardware instrument incorporating visual, audio, and physical components and novel technologies to enhance social interactions.
- Assist faculty and graduate students with research and development issues.
- Current project: Integration of Chalktalk with creative story lines and learning problems (e.g., boat's velocity problem, Piaget's 3-mountain task)
- **Supervisors:** Prof. Winslow Burleson and Post-Doctoral Scholar Gustavo Almeida

WORK EXPERIENCE

Undergraduate Teaching Assistant — *August 2020 - Present*
Department of Computer Science, University of Arizona

- Assist in the instruction of CSC 335 - Object-Oriented Programming course.
- Mentor students in course lectures, online platforms, and via weekly office hours, and guide them through programming and lab assignments.
- Collaborate with the primary course instructor and other teaching assistants to aid in the development of the course content and to grade students' coursework
- **Instructor:** Dr. Jonathan Misurda

Web Developer & Designer Assistant *April 2019 - August 2020*
ITs Department, Arizona Student Unions

- Participate as a team member of the web development and design projects for Arizona Student Unions.
- Construct website architecture, programs, and scripts, and design user interfaces.
- Re-implement JavaScript, HTML, CSS, and PHP codes t improve the website efficiency and interfaces.
- **Supervisor:** Yontaek Choi

Student MMFE8 Tester *November 2019 - January 2021*
Elementary Experimental Particle Physics Department, University of Arizona

- Work in physics research lab to help support the largest scientific collaboration in the world, the Large Hadron Collider (LHC) at CERN in Switzerland.
- Run programs on Linux to test circuit boards for a particle detector.
- **Supervisor:** Michelle Solis

HONORS & AWARDS

National Round - Vietnam Fund for Supporting Technological Creations (VIFOTEC) | 4th Prize
Project: *Improving and Applying SuperMemo 2 Algorithm & Visual Learning Techniques to build a Supporting System for Studying Specialized English in Math and Natural Sciences*

- Develop a self-studying system that helps non-native English learners to study specialized English
- vocabulary for Mathematics and Science Subjects.
- Study and improve SuperMemo 2 Algorithm and to combine with visual learning techniques.
- Experience with PHP, MySQL, MVC, JavaScript, HTML, CSS, XAMPP, Adobe Photoshop.

National Round | Vietnam Science & Engineering Fair (ViSEF) | 4th Prize

Project: *Research on the application of Piezoelectric in High Frequency Linear Rotational Electric Motors*

- Do research on the applications of piezoelectric materials in high frequency rotational and translational electric motors.
- Design 2D and 3D piezoelectric motor models of improving size and efficiency.

The University of Arizona | Term Honors & Scholarships

1. International Undergraduate Tuition Award | University of Arizona (2018 - 2022)
2. Academic Year Academic Distinction | University of Arizona (2018 - 2021)
3. Dean's List With Distinction | University of Arizona (Fall 2018)
4. Dean's List | University of Arizona (2019 - 2021, all semesters)

COURSEWORK & TECHNICAL SKILLS

- **Programming Languages:** Java, Python, C/C++, Bash, PHP, SQL, JavaScript, HTML, CSS, MIPS.
- **Other:** R Programming, Matlab, jQuery, Bootstrap, ReactJS, Git, Docker, Selenium, Agile Software, Adobe Photoshop, Adobe Acrobat, Microsoft Words, Microsoft Excel, Microsoft PowerPoint.
- **Coursework:** OOP, Analysis of Discrete Structures, Software Development, Computer Organization, Systems Programming & Unix, Algorithms, Geometric Algorithms, Automata, Grammars and Languages, Web Development, Statistical Methods, Statistical Computing, Research Methods, Cognitive Development, Structure of Mind and Brain, Cognitive Neuronscience, Healthy Psychology, Animal Learning, Personality, Social Psychology.