

Emily Herbert

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EDUCATION	University of Massachusetts Amherst , Amherst, MA May 2023 PhD in Computer Science Trinity University , San Antonio, TX May 2018 BS in Computer Science
RESEARCH EXPERIENCE	University of Massachusetts Amherst , Amherst, MA June 2018 – present Simulation Input Modeling with Deep Learning Advised by Dr. Peter Haas. <ul style="list-style-type: none">• Explore previous literature covering the cross-domain of simulation and deep learning.• Implement deep learning models for input modeling.• Create comprehensive report and prototype model. Trinity University , San Antonio, TX Jan 2017 – May 2018 Audio Style Transfer with Deep Learning Advised by Dr. Matthew Hibbs. <ul style="list-style-type: none">• Reviewed relevant domain literature covering style transfer, deep learning, and audio manipulation.• Implemented deep learning models for audio style transfer.
TEACHING EXPERIENCE	University of Massachusetts Amherst , Amherst, MA Sept 2018 – present Teaching Assistant <ul style="list-style-type: none">• Help students in the Mathematical Foundation for Informatics course with mathematical logic, set theory, and proof writing.• Design and implement set operation visualization application to be used as a student educational tool. Trinity University , San Antonio, TX Aug 2016 – May 2018 Teaching Assistant <ul style="list-style-type: none">• Assisted in the Principles of Computer Science I, Principles of Computer Science II, and Introduction to Programming Logic courses.• Acted as a resource for students for help with Scala, ScalaFX, Akka, Java, JavaFX, and Greenfoot.• Designed, implemented, and upkept test server for student projects using Scala, Akka, and Actors.• Monitor student progress, host office hours, meet with students by appointment, host exam review sessions.
AWARDS	PLMW and POPL 2019 Scholarship Nov 2018 Scholarship awarded to new Programming Languages researchers to attend the 2019 Programming Languages Mentoring Workshop (PLMW) and Principles of Programming Languages Conference (POPL). 2018 UMass CICS Fellowship Mar 2018 Merit-based fellowship awarded to an outstanding graduate student applicant within the UMass Amherst College of Information and Computer Sciences (CICS).
INTERNSHIP EXPERIENCE	National Aeronautics and Space Administration (NASA) , Langley, VA June 2017 – Aug 2017 NASA Internships, Fellowships, and Scholarships (NIFS) Intern <ul style="list-style-type: none">• Contributed to the NASA Safeguard autonomous drone geofencing project.• Designed and implemented system for on-board flight control of GPS devices.• Refactored code from previous NASA flight missions to meet current mission standards. General Electric (GE), Oil & Gas , Billerica, MA June 2016 – Aug 2016 Information Technology Leadership Program (ITLP) Intern <ul style="list-style-type: none">• Created asset tracking system for shop floor using RFID, Bluetooth LE, and Raspberry Pi.• Worked with the SAP enterprise resource management software to automate EHSM compliance checks.
SERVICE	Trinity University , San Antonio, TX University Curriculum Council (UCC) Aug 2017 – May 2018 <ul style="list-style-type: none">• Reviewed and approved university curriculum additions and changes.• Served as the student representative for a student body of ~2400.

Trinity University Women in Computing (TUWIC)Jan 2016 – May 2018

- Acted as a point of contact between the Trinity University Computer Science department and the collective body of female Computer Science majors.
- Organized club activities, recruited new members, maintained active club status.
- Hosted the 2017 TUWIC TECH Camp, a three week long tech bootcamp for middle-school aged girls interested in STEM.

**RELEVANT
COURSEWORK**

University of Massachusetts Amherst, Amherst, MA

Programming LanguagesSept 2018 – Dec 2018

- Implement systems for program interpretation, type checking, verification, and compilation.

SKILLS

Languages

Scala, Python, C++, Java, Haskell, OCaml, C, C#

Libraries

Pytorch, Numpy, Keras, Tensorflow, Akka, ScalaFX, JavaFX, Matplotlib, Deeplearning4j, MLib, Tensorboard

Software

Eclipse, Greenfoot, Unity, Visual Studio, VxWorks

Tools

Apache Spark, LaTeX, XML, HTML, Alex, Happy