Emily Herbert

herbert.emilyanne.jobs@gmail.com • emilyaherbert.com • github.com/emilyaherbert

Education

2021 **MS in Computer Science**, *The University of Massachusetts Amherst*, Amherst, MA.

2018 **BS in Computer Science**, *Trinity University*, San Antonio, TX.

Skills

Languages, Proficient: Rust, Scala, JavaScript, TypeScript, Python, OCaml, C++
Familiar: Haskell, Idris, C, C#, R, Java, Greenfoot, ScalaFX, JavaFX.

Tools, Kubernetes, Docker, OpenWhisk, Google Cloud Platform, Unity .

Specialties, Serverless Computing, Cloud Computing, Language Development, Compiler Development, Software Development, Game Development, Distributed Computing, Object Oriented Programming, Functional Programming, Software Design, System Design .

Relevant Experience

May 2019 - present **PLASMA Lab**, *University of Massachusetts Amherst*.
Programming Languages and Systems at Massachusetts lab (PLASMA), advised by Prof. Arjun Guha. Researching programming language and systems tools for serverless computing.
plasma-umass.org

Emily Herbert and Arjun Guha. A Language-based Serverless Function Accelerator. 2020. [preprint, repo]

Emily Herbert. A Language-based Serverless Function Accelerator. *Cornell CAPRA Lab.* 2020. [slides]

June 2018 - May 2019 **DREAM Lab**, *University of Massachusetts Amherst*.
Data systems Research for Exploration, Analytics, and Modeling lab (DREAM), advised by Prof. Peter Haas. Researching deep learning methods for simulation input modeling.
dbgroup.cs.umass.edu

Wang Cen, Emily A. Herbert, and Peter J. Haas. NIM: Modeling and Generation of Simulation Inputs via Generative Neural Networks. *Winter Simulation Conference.* 2020. [paper]
Best Contributed Theoretical Paper Finalist

Emily A Herbert. NIM: Generative Neural Networks for Simulation Input Modeling. *SCS Summer Simulation Conference.* 2019. [slides]

Emily A Herbert, Wang Cen, and Peter J Haas. NIM: Generative Neural Networks for Simulation Input Modeling. *Summer Simulation Conference.* 2019. [short paper]

June 2017 – Aug 2017 **National Aeronautics and Space Administration (NASA)**, *Langley, VA.*
NASA Internships, Fellowships, and Scholarships (NIFS) Intern
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.

June 2016 – Aug 2016 **General Electric**, *Billerica, MA.*
Information Technology Leadership Program (ITLP) Intern
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

2021 EuroSys 2021 Shadow PC Member

2020 Mentor to 3 first-year UMass CICS PhD students, UMass CICS PhD applicant support program reviewer, Northeastern University PhD applicant support program reviewer, #ShutdownPL @ ICFP volunteer, ShutdownPL volunteer

2019 Mentor to 1 first-year UMass CICS PhD student, Winter Simulation Conference poster session reviewer