SILVIO MAYOLO
MERCERENIES@COMCAST.NET

RÉSUMÉ OF QUALIFICATIONS

Objective

I am a mathematician and computer scientist interested in teaching and research. My academic interests lie between mathematics and computer science, in the areas of category theory, formal language theory, and abstract algebra.

Education

Tennessee Technological University (Senior)
Cookeville, TN (GPA 3.9)
2014-Present
Pursuing dual degrees in Mathematics and Computer Science

Relevant Experience

- Research Assistant at the Center for Research in Extreme Scale Technologies (Summer 2017)
  At CREST, I helped develop DASHMM, the Dynamic Adaptive System for Hierarchical Multipole Methods. My work was centered around optimizing the memory management scheme to eliminate bottlenecks, both by improving the pipeline and by designing an abstraction layer to eliminate dependencies on the runtime engine.
- Research Assistant for DEEDS Software at Tennessee Technological University (2014-Present)
  Working under Dr. David Elizandro at Tennessee Technological University, I constructed a considerable number of example problems to demonstrate the utility of DEEDS, a discrete event modeling application. I was also given the opportunity to edit and revise the content of several of the chapters of his upcoming textbook on discrete event modeling.
- Computer Science Teaching Assistant at Tennessee Technological University (2014-Present)
  Every semester that I have been a student at Tennessee Tech, I have been working as a student tutor or teaching assistant, for various levels of computer science and mathematics, tutoring students in such areas as discrete mathematics, automata theory, and discrete modeling.
- Software Intern at eviCore Healthcare (Summer 2016)
  At eviCore Healthcare, I developed, analyzed, and critiqued the software that is now being used as the front-end of their client-facing user interface. Over the summer, I was given the opportunity to work with each of the different departments within the company's Information Technology department.
- Programming Language Designer and Developer for Latitude (2016-Present)
  In response to what I perceive as an unfortunate gap in the space of programming languages, I am actively working on a general-purpose prototype-oriented programming language, which is currently in an experimental but usable state.

Publications and Books

- DASHMM accelerated Adaptive Fast Multipole Poisson-Boltzman Solver on Distributed Memory Architecture (Publication Pending)
- Performance Evaluation of Industrial Systems (Publication Pending)

Memberships and Activities

- Former President and current Vice President of Tennessee Tech Functional Programming Club (2014-Present)
- Current Member of the Tennessee Tech Honor College (2014-Present)
- Current Member of the Tennessee Tech Kappa Mu Epsilon chapter (2016-Present)