Emmanuel Suárez Acevedo

emmanueljs1@gmail.com • emmanuelsuarez.com
linkedin.com/in/emsuac • github.com/emmanueljs1

Education

University of Pennsylvania School of Engineering and Applied Science — **Philadelphia, PA**
Candidate for an MSE in Computer and Information Science — *May 2024*

University of Pennsylvania School of Engineering and Applied Science — **Philadelphia, PA**
BSE with Honors in Computer and Information Science — *May 2019*
Courses: Advanced Topics in Programming Languages, Computer Aided Verification, Compilers and Interpreters, Operating Systems, Computer Graphics, Software Foundations, Analysis of Algorithms, Computer Architecture

Experience

Graduate Researcher — **Philadelphia, PA**
University of Pennsylvania — *August 2022 – Present*
* Studied the duality of effects and coeffects in call-by-push-value
* Developed a proof by logical relations that can be used for teaching the technique of logical relations with a proof assistant
* Wrote an online tutorial for normalization-by-evaluation in literate Agda
* Formalized a type system and semantics for a network programming language

Senior Software Engineer — **San Francisco, CA**
Strava — *August 2019 – July 2022*
* Led the design and implementation of core system for modeling types of activities
* Mentored junior engineers in microservice architecture and Scala programming
* Used Apache Spark to build a geospatial data export tool for city planners
* Built tools to verify and ensure correctness of internal route data
* Developed a Scala microservice to serve all static maps in product

Teaching

Teaching Assistant — **University of Pennsylvania**
CIS 5520: Advanced Programming — *August 2022 – December 2022*
* Assist with in-class discussion and cooperative exercises centered around functional programming patterns in the Haskell programming language
* Advise student groups on a final project of their choosing in Haskell showcasing the material covered over the course of the semester

Head Teaching Assistant — **University of Pennsylvania**
CIS 120: Programming Languages & Techniques I — *August 2016 – May 2019*
* Co-lead and prepare a weekly recitation to review course material on core programming languages and techniques, taught in OCaml and then Java
* Hire and train new teaching assistants

Skills

Languages: Agda, Haskell, Scala, OCaml, Java, Coq, Ruby, C/C++, Javascript
General: Git, LaTeX, Rails, React, Fluent in Spanish

Awards

SHPE 2023 National Convention Funding, University of Pennsylvania SHPE Chapter (2023)
PLMW @ ICFP 2023 Funding, ACM SIGPLAN (2023)
Dean's Master's Scholarship, University of Pennsylvania School of Engineering and Applied Sciences (2022)