# **Emmanuel Suárez Acevedo**

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### **Research Interests**

Programming languages and their design, type systems, functional programming, strongly typed programming languages, computer science education

### **Education**

University of Pennsylvania School of Engineering and Applied Science

University of Pennsylvania School of Engineering and Applied Science

Philadelphia, PA May 2023

Candidate for an MSE in Computer and Information Science

Philadelphia, PA

BSE with Honors in Computer and Information Science

May 2019

**Courses**: Compilers and Interpreters, Operating Systems, Computer Graphics, Software Foundations, Analysis of Algorithms, Software Design / Engineering, Computer Organization and Design, Computer Architecture

## Experience

**Graduate Researcher** 

Philadelphia, PA

University of Pennsylvania

August 2022 – Present

### **Senior Software Engineer**

San Francisco, CA

Strava

August 2019 – July 2022

- \* Designed and developed new core system to model different types of activities
- \* Mentored junior engineers in microservice architecture and the Scala programming languages
- \* Developed a Scala microservice to serve all static maps in product
- \* Used Apache Spark to build a geospatial data export tool for Strava Metro customers
- \* Built tools to verify and ensure correctness of internal route data

### Software Engineering Intern, iOS

San Francisco, CA

Strava

June 2018 – August 2018

## **Undergraduate Researcher**

**Philadelphia, PA** *January* 2017 – *May* 2017

University of Pennsylvania

\* Worked on a proposal for an extension to the Glasgow Haskell Compiler which would allow binding existential type variables to data constructors in

patterns, advised by Dr. Stephanie Weirich

## **Teaching**

## **Teaching Assistant**

University of Pennsylvania

CIS 5520: Advanced Programming

August 2022 - Present

\* Assist with in-class discussion and cooperative exercises centered around functional programming patterns in the Haskell programming language

## **Head Teaching Assistant**

Philadelphia, PA

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: Scala, Java, OCaml, Haskell, Ruby, C, Rust. Swift

General: Git, Rails, Apache Spark, Cassandra, MySQL, iOS, Unity, Linux, LaTeX, Agile, React, Fluent in Spanish

## Diversity, Equity, and Inclusion

### Anti-racism Lead

Tech Brand and Diversity Group, Strava

\* Meet biweekly with a small group in the technology organization to discuss initiatives that could be taken both at large and within the technology organization itself to support diversity, equity, and inclusion, with a focus on antiracism

## San Francisco, CA

*September* 2020 – *June* 2022

### **Director of Finance**

The Percentage Project, Inc.

\* Kickstarted financial and accounting systems for nonprofit organization dedicated to helping every person of every background embrace their diversity and feel a sense of belonging in the field that they pursue

### San Francisco, CA

*November 2019 – June 2020* 

### **VP** of Finance

Society of Hispanic Professional Engineers, University of Pennsylvania Chapter

\* Fundraise and organize bringing student members to the SHPE National conference

### San Francisco, CA

May 2016 - May 2019

## **Chapter Founder and Vice President**

Society of Hispanic Professional Engineers Jr., Dorado Academy Chapter

\* Founded and organized a SHPE Jr. chapter in high school, promoting Puerto Rican representation and excellence in STEM

## Dorado, Puerto Rico

*May* 2013 – *May* 2015