# **Emmanuel Suárez Acevedo**

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

## **Research Interests**

Programming languages and their design, type systems, formal methods, 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 2024

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 a new core system to model different types of activities
- \* Mentored junior engineers in microservice architecture and Scala programming
- \* 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
- \* Developed a Scala microservice to serve all static maps in product

# Software Engineering Intern, iOS

San Francisco, CA

Strava

June 2018 – August 2018

January 2017 - May 2017

## **Undergraduate Researcher**

University of Pennsylvania

Philadelphia, PA

\* 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 Prof. Stephanie Weirich

# **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

## **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:** Scala, Haskell, OCaml, Java, Ruby, C/C++, Rust, Swift

General: Git, Rails, Apache Spark, Cassandra, MySQL, iOS, LATEX, 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* 

# **CIS Diversity Summit Organizer**

University of Pennsylvania

\* Collaborate in organizing a summit bringing together all members of the computer and information science community to determine how to work together to create a more diverse, inclusive, and supportive environment

## Philadelphia, PA

Aug 2018 – May 2019

# **VP** of Finance

Society of Hispanic Professional Engineers, University of Pennsylvania Chapter

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

## Philadelphia, PA

*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, promoting Puerto Rican representation and excellence in STEM

## Dorado, Puerto Rico

*May* 2013 – *May* 2015