

# 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

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## Education

**University of Pennsylvania School of Engineering and Applied Science** **Philadelphia, PA**  
*Candidate for an MSE in Computer and Information Science* *May 2023*

**University of Pennsylvania School of Engineering and Applied 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

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## 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 Scala programming
- \* 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**  
University of Pennsylvania *January 2017 – May 2017*

- \* 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
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## 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
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## Skills

**Languages:** Scala, Java, OCaml, Haskell, Ruby, C, Rust, Swift

**General:** Git, Rails, Apache Spark, Cassandra, MySQL, iOS, Unity, Linux,  $\text{\LaTeX}$ , Agile, React, Fluent in Spanish

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## **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 anti-racism

**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*

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