

SANTIAGO PEREZ LUGO

perezlugosantiago@gmail.com

(571) 236-8603 | www.linkedin.com/in/santiago-perezlugo

EDUCATION

University of Virginia, Charlottesville, VA

B.S. in Computer Science, Minor in General Business

May 2026

GPA: 3.84 | In Major GPA: 4.0

Dean's List, Phi Eta Sigma Honor Society

Relevant Coursework: Data Structures and Algorithms II, Discrete Math and Theory, Computer Systems and Organization, Software Development Essentials, Probability

PROFESSIONAL EXPERIENCE

UVA Computer Science Department, Charlottesville, VA

Undergraduate Research Assistant

March 2024 - Present

- Develop a baseline database for binary analysis by aggregating over 100 public GitHub repositories and CPython libraries, enhancing the dataset for a binary stream comparison tool
- Designed and developed modular tools for comparing binary code using control flow graphs
- Implement Graph Convolutional Network (GCN) models to analyze and align binary code, utilizing TensorFlow to process embeddings and PyTorch for handling graph-structured data

UVA Applied Mathematics Department, Charlottesville, VA

Ordinary Differential Equations Teaching Assistant

August 2023 - Present

- Facilitate a dynamic learning environment as a Teaching Assistant for a 100-student in-person math class, engaging with students to address questions and assisting student comprehension of intricate ODE concepts
- Manage over 150 grading tasks weekly and uphold systematic records of over 50 students
- Host office hours providing assistance to students

Kamp for Kids, Charlottesville, VA

Google Ads and Website Manager

January 2024 - March 2024

- Updated website images, text, and data regularly to align with latest organizational objectives and user needs
- Employed Google Ads and Tag Manager to design and supervise effective, budget-friendly advertising campaigns
- Leveraged data from Google Analytics to refine website content and design, aligning with user preferences and behavior patterns

America Reads, Charlottesville, VA

Tutor

September 2022 - December 2023

- Tailor english and math lesson plans based on students' individual needs in preparation for Standard of Learning (SOL) tests
- Monitor students' progress daily over course of nine months, adjusting teaching methods to ensure optimal learning outcomes

PROJECTS

BracketBuddy, SwiftUI/iOS (Swift, SQLite)

- Developed a dynamic team management and bracket generation iOS app using SwiftUI
- Architected a robust tournament logic handles player additions, team randomization, and bracket generation, accommodating both random and manual player assignments to teams
- Integrated a persistent storage mechanism for saving and retrieving tournament states utilizing SQLite

Automatic File Organizer, Python(os, shutil, JSON)

- Engineered a Python application for efficient file management with dynamic rule-based organization
- Integrated into a desktop shortcut with real-time feedback, visually signaling file organization progress and completion
- Integrated JSON for flexible configuration, allowing users to customize file organization structure according to needs

LEADERSHIP EXPERIENCE

Cracking the Interview, Charlottesville, VA

Executive Committee

September 2023 - Present

- Manage an annual budget of \$5,000, allocating funds strategically across events
- Assist in teaching GitHub workshops, LeetCode practices, and personal project workshops
- Oversee design and distribution of interview guides, coding challenge solutions, and internship application tips, via an online repository

TECHNICAL SKILLS

- Languages: Java, Python, C, Swift, HTML, JavaScript, SQL, x86-64 Assembly
- Skills: SwiftUI, Git, Microsoft Office, Matlab, Google Ads
- Dialect: English (Native Proficiency), Spanish (Native Proficiency)