Henrique Foureaux Lee

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Education

Carnegie Mellon University, School of Computer Science
B.S in Computer Science | 2022-Current | Expected 2026
GPA: 3.73/4.0 (As of 01/01/2023)
Selected Coursework: Principles of Imperative Computation (15122), Mathematical Foundations for Computer Science (15151), Matrices and Linear Transformations (21241)

Singapore American School
High School Diploma, Magna Cum Laude | 2018-2022
GPA: 4.3
Selected Coursework: Advanced Topic: Data Structures, Advanced Topic: Linear Algebra, Advanced Topic: Multivariable Calculus

Skills

Programming Languages: C# · Javascript · Java · Python · C · HTML/CSS · Swift · HLSL
Game Engines: Unity · GameMaker
Digital Art: Photoshop · Blender · Aseprite
Data Analysis: Julia · Excel · LaTeX
Languages: English (Native), Spanish (Native), Portuguese (Native), Mandarin (Advanced)

Projects

ICOE
Architected and developed a framework that allows game developers to create in-game entities that evolve based on interactions with other entities as well as their environment.

N-Bubble Generation
Leveraged mathematical level sets to design a series of algorithms that provide a unique approach to procedurally generated terrain in two and three dimensions.

OOP Lecture Curriculum
Created a series of detailed video lectures and presentations teaching all the fundamental concepts behind Object Oriented Programming.

Darwin's Game
Based on Conway's game of life, Darwin's game is a cellular automata simulation where organisms with unique characteristics compete for scarce resources to see which traits are more favorable under different environmental conditions.

Experiences

SALSA @ CMU (Spanish and Latin Student Association)
Freshman Representative 2022-Present
Helped to plan, coordinate, and advertise events ranging from dances to guest speaker presentations, that advocated for Latin American culture within Carnegie Mellon University.

ECHO @ SAS (Educating Children of Hispanic Origin)
Vice President (2019-2020), President (2020-2022)
Led ECHO, a service organization that aided underprivileged children in Bogota, Colombia. This included outlining and leading weekly meetings with the club's members, harnessing the diversity within the club to produce innovative and versatile initiatives that raised funds whilst advocating for Latin American culture, and devising creative ways of advertising these events.

Computer Science National Honor Society @ SAS
Co-president (2021-2022)
Using the lecture curriculum that I developed (see OOP Lecture Curriculum), I pioneered computer science tutoring within the school. This included organizing and leading group tutoring sessions covering class material, individual tutoring sessions to help those who needed one on one attention, and creating problem sets to help students study for assessments and the AP Computer Science Exam.