Victor Hugo Del Carpio Gomez

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Education

Yale University — New Haven, CT
Accelerated BS/MS in Computer Science, **GPA:** 3.39/4.0 — *May 2024*

- **Honors:** QuestBridge National College Match Scholarship.

Centreville High School — Clifton, VA
Advanced High School Diploma, **GPA:** 4.4/4.0 — *June 2019*

- **Honors:** Mathematics Medallion, NHRP Scholar, QuestBridge CP Scholar, National AP Scholar. Yale Young Global Scholars (ASE) and MIT's MOSTEC program (Machine Learning, Science Writing) participant.
- **Relevant Coursework:** AP Calculus BC, Multivariable Calculus and Linear Algebra (Mason-FCPS Math Dual Enrollment), AP Computer Science A, Adv. Computer Science AB, STEM Engineering and Robotics.

Skills

Proficient: Python, Java, HTML/CSS, R, C/C++.
Familiar: JavaScript, Dart, UNIX, SQL.
Libraries: Numpy, Pandas, Matplotlib, Scikit-learn.
Concepts: Data Structures, Version Control (Git).

Experience

Student Technology Collaborative — New Haven, CT / Remote
Student Technician — *Oct 2019 - Present*

- Provided in-person and remote troubleshooting and support on IT-related issues for the Yale student body.
- Assessed and repaired computer software/hardware issues, including, but not limited to: malware, data corruption, software re-installation, and water damage.
- Facilitated communication with clients throughout the repair process via the ServiceNow ticketing system.

Yale Efficient Computing Lab — Remote
Undergraduate Research Assistant — *May - Aug, 2020*

- Utilized an open-source system simulator for x86 architecture to model multi-core disaggregated memory systems in order to observe memory allocation and access patterns.

***Used*:** Python 2.x/3 (Pandas, Matplotlib), C/C++ (Boost), Gem5, PARSEC 3.0.

Projects

Face-Py Bird, ***Used*:** Python 3.7, OpenCV, Dlib.

- Flappy Bird implementation which utilizes facial landmark recognition and head pose estimation to replace conventional upward arrow key inputs with head nod gestures.

Sudoku AI, ***Used*:** Python 3.7, OpenCV, Keras.

- Augmented reality solver that uses Computer Vision, Convolutional Neural Networks for digit recognition, and the backtracking algorithm with constraint propagation to find, extract, and solve a puzzle in real-time.

Leadership Experience

Yale Student Quantitative Research Group — New Haven, CT
Director of Technology — *May 2020 - Present*

- Led the development small-scale quantitative finance and econometric-related research projects.
- Developed and maintained a responsive website written in HTML/CSS/JS for the organization.

STEM for the Streets — Washington, D.C.
Executive Director of Virginia Chapter — *Sept 2017 - Present*

- Led multi-week workshops in 5 elementary and middle schools in SE Washington, D.C. and Northern Virginia, reaching over 100 underprivileged students.
- Presented organization pitch to representatives of Microsoft, Amazon Web Services, UNICEF, and ECLAC.