Stewart Slocum

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Education

B.S. Computer Science, Applied Math and Statistics, *Johns Hopkins University* **Graduating May 2021**

GPA: 3.81

Minors in Physics and Music (Piano @ Peabody)

Honors: Dean's List all semesters, National Hispanic Scholar Recognition Program Semifinalist

Selected Coursework: Intro to Convexity (Optimization), Deep Learning, Deep Learning in Discrete Optimization (see final project on Protein Design), Statistics, Algorithms, Parallel Programming, Molecules and Cells

Work Experience

Dyno Therapeutics, *Machine Learning Intern* **Upcoming Summer 2020**

Universidad del Valle, CIBioFi, *Machine Learning/Deep Learning Research* **Winter 2020**

Working with CIBioFi's Laboratorio de Agricultura Inteligente, led the development of a machine learning-based approach for downscaling medium-range precipitation forecasts using random forests and geospatial satellite data.

NASA Goddard Space Flight Center, *Quantum Computing Research Intern* **Summer 2019**

Contributed to the development of a hybrid Quantum Annealing Solver on the D-Wave Quantum Computer for Protein Design. Worked on characterizing the method's scaling behavior and improving the hybrid solver to more efficiently optimize larger problems. Co-authored the following paper (in preprint):
https://www.biorxiv.org/content/10.1101/752485v1

NASA Goddard Space Flight Center, *Virtual Reality Software Engineering Intern* **Summer 2017 and 2018**

Developed Virtual Reality scientific visualization tools to study LIDAR and other point cloud data with applications in astrophysics, heliophysics, marine biology (PointCloudsVR), and in planetary science (LandscapesVR).

Co-developed Apollo 17 simulation from Lunar DEM data, and presented findings at the 48th Lunar and Planetary Science Conference (LPSC) in Houston Texas (abstract: https://www.hou.usra.edu/meetings/lpsc2018/pdf/2192.pdf).

For more information see this article on intern involvement in the project: https://www.npr.org/2017/11/24/565673749/nasa-taps-young-people-to-help-develop-virtual-reality-technology.

Projects

SAIL (Socratic Artificial Intelligence Learning) **October 2018 -**

Developed a voice application to improve medical education. SAIL is a conversational voice interface to prepare medical students and orthopedic residents for board exams, evaluating user understanding with basic Natural Language Processing methods. SAIL has received funding from Orthobullets and the Johns Hopkins Department of Orthopedic Surgery.

See more of my work on GitHub! https://github.com/stewy33

Skills

- Pytorch, numpy, matplotlib, Python, C/C++, Google Cloud
- Rosetta Protein Software Suite, D-Wave Quantum Computer
- 3-D graphics programming (OpenGL, Unity, Unreal, and OpenSceneGraph)
- Front-end Web Dev (Javascript, React, HTML & CSS), Haskell, C#, Java

Ask for previous employer references, they would love to tell you about me!