lucassaldyt@gmail.com 505-506-1245

http://github.com/LSaldyt Mesa, Arizona

Education

Barrett, The Honors College. Arizona State University

Bachelors of Computer Science, GPA: (3.7)

Tempe, Arizona

Sep. 2017 - Current

MIT Open Courseware

Online

Supplementary Courses: assignments at github.com/LSaldyt

Ongoing

- Data Structures and Algorithms (Demaine), Quantum Algorithmic Complexity (Aaronson), Quantum Mechanics (Zwiebach), Artificial Intelligence (Winston), Artificial General Intelligence (Fridman), Society of Mind (Minsky), Computer Security (Zeldovich), Information Theory (Lloyd)

Experience

NASA (National Aeronautics and Space Administration)

Cape Canaveral, Florida Jun. 2019 - Aug 2019

Software Engineering Intern

- Benchmarked and optimized safety-critical live validation system for Launch Control System
- Published abstract documenting software improvements made during the summer

Sandia National Laboratories

Albuquerque, New Mexico

Quantum Computation Intern

Jun. 2015 - Sep. 2018 (3 Summers)

- Developed high-fidelity quantum benchmarking (Gate Set Tomography) software
- Created a distributed high-performance simulation, verification, and data analysis software
- Oversaw porting entire codebase (over 1 million lines) to Python3.x

The Fluid Analogies Research Group

Remote (paid)

Cognitive Science Intern

Oct. 2016 - Sep. 2018

- Revitalization of Douglas Hofstadter's "copycat" cognitive model
- Statistical analysis and comparison of various models to human data
- Dr. Carlos Castillo-Chavez's Complex Systems Research Group Mathematics Intern

Tempe, Arizona Oct. 2018 - Current

- Math and computer modeling of ant nest choice and alarm propagration

Unitary Fund Remote (paid)

 $Quantum\ Software\ Researcher$

Jun. 2018 - Current

- Prototyping of a quantum programming language, called "Curry"
- Presentation in Brussels, Belgium at the FOSDEM Quantum Computing Conference

Los Alamos National Laboratories

Albuquerque, New Mexico

Quantum Computation Intern (Shadow)

April 2017

Benchmarking the knapsack problem on LANL's DWave and IBM's 5-qubit machine

Skills

Programming Languages: Python, C++, Clojure, Java, Haskell

Operating Systems: Linux (Arch, Redhat, Ubuntu), MacOS X, Windows

Applications: Vim, IATFX, Jupyter Notebook, MatLab, Autodesk design, Office suites

Libraries: tensorflow, pandas, seaborn, numpy, scikit learn

Natural Languages: English, Ukranian, Spanish