lucassaldyt@gmail.com 505-506-1245

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

#### Education

Arizona State University: Barrett, The Honors College

Tempe, Arizona

Bachelor of Science in Computer Science, GPA: 3.7

Sep. 2017 - Current

MIT Open Courseware

Online

Quantum Computation, AI, and CS courses

## Experience

#### National Aeronautics and Space Administration

Cape Canaveral, Florida

Software Engineering Intern

Jun. 2019 - Aug. 2019

Worked on class A, safety-critical, human rated spaceflight ground control software by participating in the full software development lifecycle and using agile processes

Created, benchmarked, and optimized verification/validation software for launch control tests Independently prototyped original display profile saving system for launch control engineers

#### Sandia National Laboratories (Dr. Erik Nielsen)

Albuquerque, New Mexico

Quantum Computation Intern

Jun. 2015 - Sep. 2018

Developed high-fidelity quantum benchmarking (Gate Set Tomography) software Created distributed high-performance simulation, verification, and data analysis software Assisted in publishing papers in quantum benchmarking

## Los Alamos National Laboratories (Dr. Scott Pakin)

Albuquerque, New Mexico

Quantum Computation Shadow

Apr. 2017

Benchmarked the knapsack problem on LANL's DWave annealer and IBM's machines

### ASU Complex Systems Research (Dr. Yun Kang)

Tempe, Arizona

Mathematics Research Assistant

Oct. 2018 - Current

Unique math/computer modeling and visualization of ant nest choice and alarm propagation Author of a computation biology paper on alarm propagation, published in PNAS

# Fulton Undergraduate Research Initiative (Dr. Ajay Bansal)

Tempe, Arizona

Machine Learning Researcher

Sep. 2018 - Jun. 2019

Developed Qurry, a quantum programming language

Machine learning research, focused around Kolmogorov complexity and program learning

## The Fluid Analogies Research Group (Dr. Alexandre Linhares)

Remote (paid)

Cognitive Science Research Assistant

Oct. 2016 - Sep. 2018

Revitalized of Douglas Hofstadter's "copycat" cognitive model

Statistical analysis/visualization and comparison of various models to human data

# Unitary Fund

Remote (paid)

Quantum Software Researcher

Jun. 2018 - Current

Prototyping of a quantum programming language, called "Qurry"

Presented in Brussels, Belgium at the FOSDEM Quantum Computing Conference

#### Skills

[Programming Languages:] Python, C++, Java, Bash, Clojure (LISPs), Haskell, C, MATLAB, R, Fortran

[Applications:] Vim, LATEX, Git, MPI, Supercomputing (Slurm), Jupyter Notebook, Autodesk Design

[Operating Systems:] Linux, MacOS X, Windows

[Natural Languages:] English, Ukranian, Spanish