lucassaldvt@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,

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

Operating Systems: Linux, MacOS X, Windows

Natural Languages: English, Ukranian, Spanish