

Lucas Saldyt

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<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 - May 2021
- **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, L^AT_EX, Git, MPI, Supercomputing (Slurm), Jupyter Notebook, Autodesk Design

Operating Systems: Linux, MacOS X, Windows

Natural Languages: English, Ukrainian, Spanish