

Lucas Saldyt

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

Education

- **Barrett, The Honors College. Arizona State University** Tempe, Arizona
Bachelors of Computer Science, GPA: (3.7) Sep. 2017 - Current
- **MIT Open Courseware** Online
- *Important Supplementary Courses:*
 - Data Structures and Algorithms (Demaine), Quantum Algorithmic Complexity (Aaronson), Quantum Mechanics (Zwiebach), Artificial Intelligence (Winston), Artificial General Intelligence (Fridman), Society of Mind (Minsky), Information Theory (Lloyd)

Experience

- **NASA (National Aeronautics and Space Administration)** Cape Canaveral, Florida
Software Engineering Intern Jun. 2019 - Aug 2019
 - Benchmarked and optimized safety-critical live validation system for launch control system
 - Independently created original display profile saving system for launch control operators
- **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 a 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 Intern (Shadow) April 2017
 - Benchmarking the knapsack problem on LANL's DWave annealer and IBM's machines
- **ASU Complex Systems Research (Dr. Yun Kang)** Tempe, Arizona
Mathematics Intern 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 - June 2019
 - Development of 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 Intern Oct. 2016 - Sep. 2018
 - Revitalization 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"
 - Presentation in Brussels, Belgium at the FOSDEM Quantum Computing Conference

Skills

Programming Languages (by experience): Python (2.x-3.x), C++ (1998-2020), Java (8-11), 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