

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
 - 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
 - Assisted in publishing papers in Quantum Benchmarking
- **Dr. Carlos Castillo-Chavez's Complex Systems Research Group** Tempe, Arizona
Mathematics Intern Oct. 2018 - Current
 - Math and computer modeling of ant nest choice and alarm propagation
 - Author of a machine-learning computation biology paper, published in PNAS
- **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
- **Fulton Undergraduate Research Initiative (Under Dr. Ajay Bansal)** Tempe, Arizona
Machine Learning Researcher Sep. 2018 - Current
 - Continuing development of the Qurry quantum programming language and related statistical machine learning research
- **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
- **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: Python, C++, Clojure, Java, Haskell

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

Applications: Vim, L^AT_EX, Jupyter Notebook, MatLab, Autodesk design, Office suites

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

Natural Languages: English, Ukranian, Spanish