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 - 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 system for launch control system
  - Independently prototyped original display profile saving system for launch control system engineers
  - Gave regular status to various levels of technical and organizational management
- **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 — *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 Research Assistant — *Oct. 2018 - Current*
  - Unique math/computer modeling and visualization of ant nest choice and alarm propogration
  - Author of a computation biology paper on alarm propogation, 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 Research Assistant — *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: 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