Lucas Saldyt

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505-506-1245   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 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 propogation
    - 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 (by experience): Python (2.x-3.x), C++ (1998-2020), Java (8-11), 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