Lucas Saldyt

lucassaldyt@gmail.com • 505-506-1245 • https://github.com/LSaldyt

Education

Arizona State University — Tempe, Arizona
PhD in Computer Science, GPA: 4.0 — *Sep. 2021 - Present*

Arizona State University: Barrett, The Honors College — Tempe, Arizona
Bachelor of Science in Computer Science, GPA: 3.71 — *Sep. 2017 - May 2021*

Experience

PathAI — Boston, Massachusetts
ML Engineering Intern — *Jun. 2020 - Aug. 2020*

- Deployed cancer diagnosis model in a safe real-world medical device *(Python, Rust, AWS, tensorflow)*

NASA Glenn Research Center — Cleveland, Ohio
Machine Learning Intern — *Jan. 2020 - May 2020*

- Architected a modular data and machine learning pipeline which aggregates and refines image, article, and taxonomy data on 1.9 million living species *(Python, neo4j)*
- Experimented with EfficientNet CNN to classify species at 82% top-1 accuracy *(pytorch)*
- Created a custom search engine based on original Google publications

NASA Kennedy Space Center — Cape Canaveral, Florida
Software Engineering Intern — *Jun. 2019 - Aug. 2019*

- Benchmarked and developed class A, safety-critical, human-rated spaceflight ground control software for the Artemis lunar exploration missions *(C++, Java, Agile)*

ASU Complex Systems Research Group — Tempe, Arizona
Mathematics Research Assistant — *Oct. 2018 - Jun. 2019*

- Analysis and modelling of alarm signal propagation in ants *(Python, R, Diff. Eq.)*

Sandia National Laboratories — Albuquerque, New Mexico
Quantum Computation Research Intern — *Jun. 2016 - Sep. 2018*

- Created distributed high-performance software for benchmarking & characterizing ion-trap quantum computers via gradient-based optimization *(Python, numpy, SLURM)*

Publications & Presentations

Curiosity in Path-Planning: Synthesizing Path-Planners for Efficient Exploration — Apr. 15th, 2021
ICRA "Towards Curious Robots" Workshop — *Virtual*

Meta-Learning for Planning: Automatic Synthesis of Sampling-Based Path Planners — Mar. 26th, 2021
ICLR Learning-to-Learn Workshop — *Virtual*

Qurry, a Quantum Programming Language — Feb. 2019
FOSDEM Quantum Computing Development Workshop — *Brussels, Belgium*

Projects

ASU/NASA JPL DORA CubeSat — Aug., 2020-May 2020
Ground Software Engineering Student Lead — *Tempe, AZ*

- Led development of robust ground station software for the DORA satellite, including radio communications, integration testing, and real-time user interface *(Rust, Python, KubOS)*

Skills

Programming Languages: Python, C++, Rust, Java, C, x86_64 Assembly, Clojure (LISPs), Haskell ...

Technologies: pytorch, tensorflow, numpy, pandas, nltk, plotly, seaborn, matplotlib, Django, neo4j, postgres, linux, AWS, s3, kubernetes, Docker, git, Agile, LaTeX