Austin, TX, USA

srikarnikhil.kalidasu@gmail.com

nik875.github.io

TECHNICAL SKILLS

Python

NumPy, SciPy, Pandas, TensorFlow

Java

Object-Oriented Programming, Polymorphism

C++

Robotics, Microcontrollers

Linux

Git, CLI Familiarity

Natural Language Processing

Transformer, LSTM, Sentiment Analysis

Image Processing

ConvNet Classifier, GAN, Vision Transformer

SOFT SKILLS

Work Ethic

Leadership

Scientific Writing

Communication

PROJECTS

Independent Research (August 26, 2022 - Present)

Representational learning for DNA sequence encoding, comparison, and visualization.

Trained a Transformer-based deep neural network to represent DNA sequences as 2D points, opening the door to beautiful and informative genomics dataset visualization.

INTERESTS

Hiking and Rock Climbing

Repurposing Old Electronics to Reduce E-Waste

Playing with my OS

Contributing to Open Source

Nikhil Kalidasu

Data Scientist

Polymathic Data Scientist with experience ranging from aerospace to microbiology to application development. Seeking experience with real-world research and problem solving in healthcare, aerospace, and computational modeling.

WORK EXPERIENCE

TJ Space Program (August 26, 2018 - May 31, 2022)

Project Manager

- Worked four years on TJ REVERB, a 2U cube satellite built without using a satellite kit designed for lanuch into Low-Earth Orbit.
- Personally wrote over 60% of satellite software, and carried out code reviews making use of Issues and Pull Requests on GitHub to coordinate work between a large team.
- Initiated club rebrand and increased club size by over 30% by starting two new missions and reaching out to fellow students.

Key Achievement: Programmed, assembled, tested, and launched TJ REVERB to orbit, completing a project that had been delayed for years.

activities.tjhsst.edu/cubesat

EDIT ML Internship (June 12, 2021 - August 26, 2021)

ML Intern

- Worked on a small team to unmask tissue slide images using GANs, GNNs, and CNNs.

Key Achievement: Learned the basics of applied machine learning.

Housekeeping Payment Solutions (June 12, 2020 - August 26, 2020)

Backend Intern

- Worked on a large team developing a payment app for hotel housekeepers.

Key Achievement: Learned Django and designed database APIs.

EDUCATION

University of Texas at Austin (August 22, 2022 - Present)

BS, Computer Science

https://www.utexas.edu/

Thomas Jefferson High School for Science and Technology (August 26, 2018 - May 31, 2022)

Advanced Diploma

https://tjhsst.fcps.edu/

PUBLICATIONS

Identifying and Overcoming Challenges in High School CubeSat Programs (August 06, 2022)

Small Satellite Conference

Recommendations for CubeSat program organization from interviews of 6 High School CubeSat programs in America and our personal experiences at TJ Space Program.

https://smallsat.org/

Evaluation and Methodology of Python Flight Software on Linux Based Architecture with an Iridium Radio for CubeSats

IEEE Xplore

Upcoming paper summarizing and evaluating our satellite's hardware and software design choices.

TJREVERB: A High School CubeSat Story

AeroConf 2023

Upcoming paper summarizing the challenges we faced as a high school CubeSat program and the ways we overcame them.