BHARATH JYOTHI

THIRD-YEAR UNDERGRADUATE

CONTACT

📱 765-409-3305

✉️ bhj224@lehigh.edu

🌐 linkedin.com/in/bharathjyothi

📍 Bethlehem, PA

EDUCATION

Lehigh University

B.S. in Computer Science and Business

Minor in Data Science

Minor in Economics

August 2020- Expected December 2023

GPA: 3.50

SKILLS

Java

Python

C

C++

SQL

R

React

Rust

Haskell

Git

ACHIEVEMENTS

April 2023
  Google Hack's for Change Hackathon (1st place)

April 2022
  Undergraduate Research Symposium (1st place)

April 2021
  Dorothy and Stabler Award

LANGUAGES

English

Spanish

WORK EXPERIENCE

Software Engineering Intern

VRi   May 2022 - July 2022

Barcelona, Spain

- Responsible for establishing a consistent server-side connection with potential clients on the DICOM file-loading service
- Implemented a caching mechanism that avoided the re-reading and processing of the same DICOM by storing the processed data in memory or on the hard disk
- Used multi-processing to parallelize the computation across multiple cores or nodes, significantly reducing the processing time by about 10 minutes
- Implemented unit testing for new API to ensure code met quality standards before deployment and usage by medical partners

Biomedical Imaging Research Assistant

Lehigh University   May 2021-Present

Bethlehem, PA

- Developed cancer cell detection UI to differentiate between different cell lines in static images and flow videos, creating compatibility with various deep-learning models including CNNs and RNNs
- Using binary static image classification, cells were able to be identified with 99% confidence
- Incorporated the YOLO object detection module to create a model that was both computationally efficient (~3-second load time with GPU) and accurate

PROJECTS

Lutron Permit Data Analytics   January 2023-Present

- Ingested, cleaned, and standardized APIs for Lutron clients based on contractors in major cities in order to install their high-end light switches
- Implemented dynamism to the data ingestion step which allows for continual retrieval of queried data whenever an API is updated
- Created a dashboard using AWS cloud features(Glue, S3, and Athena) to visualize lighting solutions based on accumulated data from real-time APIs

Soil Sense   April 2023-Present

- Developed a web application using Google Cloud Platform's App Engine to examine the problem of soil contamination due to high phosphate levels
- Utilizes the Google Maps API to map the land coverage of in-soil phosphate, allowing farmers to monitor their soil for contamination
- Provides real-time monitoring of soil health using matplotlib visualiations, allowing farmers to make data-driven decisions that will ultimately lead to more sustainable farming practices.

LEADERSHIP

Public Relations Chair, South Asian Student Association   May 2022 - Present

- Maintained relationships with external and internal organizations around the greater Lehigh Valley, promoting volunteer opportunities within the community

Gryphon (Residential Assistant)   August 2021 - Present

- Fostered an inclusive community among 30+ residents in the residence hall by conducting programs that encourage diversity and collaboration

Global Citizenship Program Certificate   May 2021 - Present

- Investigated diversity and ethical issues in local communities, finding solutions with respect to an inherent global perspective