# SAKSHAM PURBEY

spurbey3@gatech.edu 4105 Golden Knoll Rd· Cumming, GA 30028 · (470) 695-8296

#### **EDUCATION**

**BSC: Computer Science** Georgia Institute of Technology; Atlanta, GA May 2025

Overall GPA: 3.90 **Dean's Scholar** 

Current coursework: Applied Combinatorics, Object and Design, Comp. Model Algorithms, VIP Machine Learning for Financial

Markets

High School Diploma Alpharetta High School; Alpharetta, GA

Overall GPA: 4.33

Participated in the Talented and Gifted Program Completed the Governor's Honors Program

National AP Scholar; SAT: 1530

**EXPERIENCE** 

Hacklytics- Georgia Institute of Technology; Atlanta, GA

February 2023

May 2021

- Developed a multilingual chatbot that can receive and process audio input from various languages
- Trained a Natural Language Processing model and incorporated it with an open-source chatbot

Hex Labs HackGT – Georgia Institute of Technology; Atlanta, GA

October 2022

- Created Board Band, a webapp that allows users to play instruments and music using shapes
- Trained a machine learning model to characterize shapes according to parameters like color and size
- Developed a function to track hand movement and capture depth when needed as user input

## **PROJECTS**

#### Landscape GAN

- Trained a Generative Adversarial Network to generate fake landscape images
- Used PyTorch to train a DQGAN while tracking several loss functions
- Built a pipeline to generate over 6000+ images

## **Early Cancer Detection**

- Created a webapp that takes in radiology imagining to detect cancer
- Sorted raw imaging data according to various parameters to make it more accessible for the model
- Used TensorFlow to successfully implement a Random Forest Model with 87 % accuracy

#### LEADERSHIP EXPERIENCE AND ACTIVITIES

## Big Data Big Impact - Project Lead

September 2022 – Current

- Attended several workshops to explore machine learning
- Led a team in developing a deep learning algorithm from scratch

### **Dixon Lab** – Undergraduate Research Assistant

May 2022 - August 2022

- Studied the therapeutic effects of various nanoparticles in treating lymphedema
- Ran Flow Cytometry and performed data analysis throughout numerous trials

## **AWARDS**

 Academic Excellence and Achievement Awards, multiple Honor Rolls, Presidential Award for Educational Excellence, regional and state awards in FBLA, HOSA, Online Certification from Harvard, and Science Fair

## **ADDITIONAL INFORMATION**

Programming Languages: Java, Python, Dart, JavaScript, HTML,

and CSS

Skills: Machine Learning, Data Structures, Flutter, React, and

Bootstrap

Certifications: AWS Cloud Practitioner, Data Science and Machine Learning Bootcamp