

Atul Manjunath Bharadwaj

atul.bharadwaj@nyu.edu ♦ www.linkedin.com/in/atulmbharadwaj ♦ github.com/am11449 ♦ +1 (934) 210-3650

EDUCATION

New York University

Master of Science in Computer Science

Courses: Algorithms, Cloud Computing, Artificial Intelligence

New York, NY

Sep 2021 - May 2023

GPA: 3.75/4.00

Visvesvaraya Technological University

Bachelor of Engineering in Computer Science and Engineering

Courses: Data Structures, Machine Learning, Python

Bengaluru, IN

Aug 2017 - Jul 2021

GPA: 8.81/10.00

EXPERIENCE

New York University

Course Assistant - Software Engineering

- Working with 2 Agile Scrum teams and providing technical support in Java and Python, and DevOps support on GitHub, Jenkins, and TeamCity.

New York, NY

Feb 2023 - Present

Arthmetis

Data Science Summer Associate

- Designed a database with Snowflake warehousing to trace components of a manufactured product back to sellers, along with optimized sub-queries in SQL for tracking buyers for product recalls.
- Performed customer segmentation and market basket analysis on a customer transactions dataset with an accuracy of 75 % using a custom-built machine learning pipeline on Azure. Created a dashboard for customer segmentation and analysis using Tableau.

Charlotte, NC

May 2022 - July 2022

Qualitas Technologies

Software Engineer Intern - Computer Vision

- Automated dominant color detection and filtering for an automobile assembly line that reduced the color and contrast sensor cost and usage by 50 % by clustering RGB values from multiple points on an image with OpenCV in C++.
- Automated capturing of images from high-speed video feed for quality assessment in dough assembly lines which reduced total sensor cost and usage by 15% and eliminated the use of position sensors using a custom-trained YOLO model and object tracking.

Bengaluru, IN

April 2021 - June 2021

Indian Institute of Technology - Bombay

Research Intern, Audio processing with ML

- Implemented a button in VLC media player to skip intros for video series by detecting timestamps of intro audio from videos having the same intros in Python using audio fingerprinting by creating a reference database, and audio matching.
- Created python scripts to generate online course web pages for MOOC videos by processing audio in Librosa, generating transcripts using Mozilla DeepSpeech, and synchronizing text and audio to create clickable transcripts that jump to the exact timestamp in the video.

Mumbai, IN

May 2020 - June 2020

PROJECTS

- **CourseConnect:** Leveraged the Java Spring Boot framework to create a robust REST API for managing courses. The API provides endpoints for creating, reading, updating, and deleting course records using a MongoDB database connected using JPA.
- **LinkedOut:** Built a job portal using microservices architecture using AWS Lambda (in Java) backend that runs AWS Textract and AWS Comprehend to extract skills from user's resume and matches them to jobs scraped from LinkedIn based on content-based and collaborative filtering.
- **Voice Driven Searchable Photos:** Designed an asynchronous event-driven web app to query photos through text and voice with the help of AWS using Java and Javascript. Employed Rekognition and Open Search to create an intelligent search layer to query photos for people, landmarks, etc
- **NYC Accessible Streets:** Developed a Django web app as part of an Agile team that maps accessible ramps, signals, and crosswalks using NYC OpenData with features like user favorites, and user reporting using Git version control, Travis CI and AWS EB for deployments.

SKILLS

Python, Java, JavaScript, C++, OpenCV, Linux, MySQL, Git, Jira, Azure, Agile Scrum, Tensorflow, Numpy, NoSQL, scikit-learn, TFLite, Pandas, Tableau, Docker, Hadoop, Spark, Kafka, REST API, Node.JS, React.js, Jenkins, Fast API