Atul Manjunath Bharadwaj

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EDUCATION

Cum. GPA: 3.7 / 4.0

NEW YORK UNIVERSITY

M.S. in Computer Science May 2023 | Brooklyn, NY Tandon School of Engineering

VISVESVARAYA TECHNOLOGI-CAL UNIVERSITY

B.E. in Computer Science and Engineering

July 2021 | Bengaluru, IN S J B Institute of Technology Cum. GPA: 8.8 / 10.0

LINKS

Github:// AB047 LinkedIn:// atulmbharadwai

COURSEWORK

GRADUATE

Design and Analysis of Algorithms
 Operating Systems
 Artificial
 Intelligence Cloud Computing
 Big
 Data
 Software Engineering
 Functional Programming Languages
 Information Visualization
 Developments in HCI

SKILLS

PROGRAMMING

Over 5000 lines:
Python • C++ • C
Over 1000 lines:
Java • Javascript • CSS • PHP •
Embedded C • HTML • Shell • ETEX

FAMILIAR

• MySQL • REST APIs • AWS • Azure • OpenCV • NumPy • Scikit-learn • Pandas • Matplotlib • Tensorflow • Git • MongoDB • React.is • Node.is • Tableau

EXPERIENCE

ARTHMETIS LLC | Data Science Summer Associate

May 2022 - July 2022 | Charlotte, NC

[Python, Azure, AWS, pandas]

- Hosted end points using REST API for a linear regressor on AWS, GCP and Azure. Developed an AWS Sagemaker pipeline for developing and evaluating customer churn data.
- Performed customer segmentation and market basket analysis on a transactions dataset with customer classification score of 75 % on Azure ML Pipelines.
- Created Dashboard for customer segments for comparing use of ThoughtSpot, Tableau and PowerBI for the business.

QUALITAS TECHNOLOGIES | ML Intern

April 2021 - June 2021 | Bengaluru, India [Tensorflow, C++. QTCreator, OpenCV]

- Automated dominant color detection and filtering for an automobile assembly line that reduced the color and contrast sensor cost and usage by \sim 50 %.
- Automated capturing of images from high-speed video feed for quality assessment in dough assembly lines which reduced total sensor cost and usage by $\sim 15\%$ and eliminated use of position sensors.

E-YANTRA LABS. IIT-BOMBAY | ML Research Intern

May 2020 – June 2020 | Mumbai, India

[Tensorflow, Python, Pandas, Numpy, Librosa, MDBook]

- Generated web-pages from videos with 'Click Transcript to Jump to Timestamp' feature for use in MOOC platform.
- Detected timestamps of intro audio from a series of videos having the same intros for a MOOC platform in Python using audio fingerprinting.

PROJECTS

SOKOBAN LEVELS SOLVER

December 2021

• Implemented MCTS, Genetic, Hill climber and A* algorithms to solve randomly generated levels for the sokoban game with accuracies of 67%, 90%, 75% and 99%.

ASSISTIVE CHATBOT FOR VISUALLY IMPAIRED

January 2021 - July 2021

[Python, AWS, Tensorflow, Web sockets, RASA, Node.js]

• Built a Rasa chatbot using a YoloV4-tiny network trained on a custom dataset with an MAP of $\sim 50\%$ hosted on an AWS that can direct a blind person on roads with an average latency of under 1.5s.

AWARDS

1ST/1050 e-Yantra Robotics Competition, IIT-Bombay, 2020

• The palm sized four wheeler was capable of wireless serial communication that could path plan a complex maze and self drive using onboard ToF sensors, identify numbers using OCR and line follow.