

Akshay Atam

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EDUCATION

STEVENS INSTITUTE OF TECHNOLOGY

Master of Science in Machine Learning

Cumulative GPA: 3.96/4.0

Relevant Coursework: Computer Vision, Text Mining, Deep Learning, Natural Language Processing

Hoboken, NJ

Expected May 2024

ARIZONA STATE UNIVERSITY

AI and Machine Learning MasterTrack Certificate (Online)

Cumulative GPA: 3.56/4.0

Relevant Coursework: Artificial Intelligence, Statistical Machine Learning, Knowledge Representation

Tempe, AZ

Oct 2021 – Mar 2022

INDIAN INSTITUTE OF INFORMATION TECHNOLOGY AND MANAGEMENT

Integrated Post Graduate in BTech (IT) and MTech (IT)

Gwalior, India

Jul 2016 – Jun 2021

UNIVERSITY PROJECTS

PHOTOMETRIC REDSHIFT ESTIMATION

Nov 2023

- Led a photometric redshift estimation project on SDSS galaxy datasets, employing four machine learning models to assess performance differences.
- Improved model efficiency by 65% through scaling up and cut training time by 50% via scaling out, increasing worker nodes.
- Optimized computational resources and accelerated analysis, advancing machine learning applications in astrophysical research.

HATE SPEECH DETECTION

Oct 2023

- Developed and implemented a hate speech detection system leveraging a proprietary dataset, 'HateModerate', aligned with Facebook community guidelines; achieved 91.9% accuracy in identifying and filtering out offensive content, ensuring a safer online community.
- Integrated OpenAI's moderations API to detect hate speech, delivering an impressive accuracy rate of 83.94% and safeguarding online platforms from harmful content.
- Created and deployed cutting-edge NLP algorithms to combat hate speech, realizing an 8% performance gain over machine learning models and a remarkable 22% accuracy enhancement with the API approach.

MULTI VIEW PATCH MATCH

May 2023

- Crafted a Python implementation of the PatchMatch Algorithm, enabling generation of precise depth maps from selected images, including those from the renowned Stretcha MVS dataset.
- Systematically chose three images from each dataset/scene and iteratively improved depth maps while continuously monitoring progress through visual tracking.
- Evaluated algorithm performance by conducting a comprehensive analysis of generated depth maps to ground truth data; identified areas for improvement and obtained a 15% increase in accuracy.

TECHNICAL SKILLS

Languages: Python (Proficient), C++ (Competent), SQL (Competent), Golang (Familiar)

Machine Learning Frameworks: Pytorch, PySpark, Scikit-Learn, Numpy, Pandas, Matplotlib, Seaborn

Web Development Tools: Git, Github, VS Code, Google Cloud Platform

CERTIFICATION

DATABRICKS CERTIFIED ASSOCIATE DEVELOPER FOR APACHE SPARK

Dec 2023

- Demonstrated proficiency in Spark DataFrame API, data manipulation, and understanding of core Spark architecture using Python.
- Secured 81.66% in the Databricks Spark certification, evidencing ability in data operations, Spark SQL functions, and DataFrame management in Python environments.