ANIKET KARNA

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EDUCATION

University of Utah, Salt Lake City, USA

August 2021 - Dec 2022(Expected)

Master of Science in Computer Science

Relevant Courses: Data Visualization, Operating Systems, Data Mining, Algorithms, Natural Language Processing.

University of Mumbai, India

August 2016 – October 2020

Bachelor of Engineering in Information Technology

Relevant Courses: Applied Mathematics, Data Structures and Analysis, Data Mining and Business Intelligence, Software Engineering & Project Management, and Big Data Analytics.

TECHNICAL SKILLS

- Programming Languages: Python, C, C#, Linux
- Web and Design Software: HTML, CSS, NodeJS, Typescript, Angular, Yarn, XAML, Markdown.
- Version Control: Git, GCloud
- Framework & Tools: Numpy, Pandas, Keras, Matplotlib, Seaborn, Sklearn, Paraview, ImageVis3D.

WORK EXPERIENCE

Software Engineering Intern, Evans & Sutherland (A Cosm Company), Salt Lake City, USA June 2022 – Present

- Developed a Windows Presentation Foundation C# dev search utility to improve the Digistar7 library search engine.
- Engaged in various team-building activities and completed two OKRs.
- Hands-on coding in C#, XAML, WPF, Visual Studio.

Web Developer, Energy and Geoscience Institute, Salt Lake City, USA

February 2022 - Present

- Assisted in web architecture development, deployment, documentation, debugging, and testing.
- Deployed the website on Gcloud virtual machines and configured Nginx for hosting.
- Hands-on coding using HTML, CSS, TypeScript in Angular framework.

Teaching Assistant, University of Utah, Salt Lake City, USA

August 2021 – December 2021

- Teaching Assistant for CS 2420: Algorithms and Data Structures(Fall 2021).
- Reinforced lessons presented by Professors, developed programming assignments solutions.
- Held office hours, conducted lab sessions and code reviews, and graded student assignments.

ACADEMIC PROJECTS

English Fantasy Premier League Optimal Team Generator

- Segregated player and team stats from the Fantasy Game API and performed statistical analysis on each player.
- Developed a Python algorithm that selected the best players based on their performances and ROI values using the simplex method to solve a linear programming equation.
- Achieved a rise of a total of 239 points or 12.8% with respect to last season wherein the players were selected without any algorithm.
- Technologies/Libraries used: Pandas, JSON, Seaborn, PuLP and Matplotlib

Book Recommendation System based on Goodreads Ratings

- Performed Exploratory Data Analysis to find the most highly rated books and authors from the dataset.
- Segregated ratings into batches to gather that most ratings are in the range of 3 to 4.
- Deployed elbow curve method to find no of clusters for using the k-means algorithm.
- Used ball tree algorithm in nearest neighbors method to build the recommendation model that suggests 5 books.
- Technologies/Libraries used: Python, Pandas, Seaborn, goodreads_api_client, Sklearn, Matplotlib

Waste Classification as Organic or Recyclable using Convolutional Neural Networks

- Scraped data sets of waste items for model training based on primary categories as organic or recyclable waste.
- Developed a Neural Network using Keras library and processed it using Google Colab (GPU- Virtual Machine).
- Achieved model accuracy of 92.9% and model loss of 0.206 on test data sets.
- Published a technical paper on the same in the International Journal for Science and Advance Research in Technology (ISSN 2395-1052) Volume 5, Issue 12, 2019.
- Technologies/Libraries used: Python, Google Colab, Keras, TensorFlow, Numpy and Sklearn

COURSES & CERTIFICATIONS

- Coursera Certifications for Machine Learning, Data Science Math Skills, SQL for Data Science, and Sustainability through Soccer: Systems- Thinking in Action
- Kaggle Micro-Courses: Python Programming, Intro to Machine Learning, Intermediate Machine Learning, Intro to SQL, Pandas, Data Visualization