Mohit Soni

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Work Experience

Cornell University
Ithaca, WA
Researcher
Nov 2023 - Present

- Mentored by Professor Madhur Srivastava as part of the Signal Science Lab
- Developing a computer-vision based model to discern flaws in the techniques employed by cricket batsman through video analysis
- Crafted an innovative algorithm for video segmentation, employing the Structural Similarity Index metric

Remotasks
Remote
Independent Contractor
Nov 2023 - Present

- Response for reviewing and coding computer science tasks, earning based on accuracy of submissions
- Simultaneously managing 12 projects involving Java, Python, JavaScript, C#, C++, SQL, PHP, etc.
- Successfully completed 70+ tasks maintaining a high accuracy

University of Washington Seattle
Seattle, WA
Researcher
Feb 2022 - Sep 2022

- Mentored by University of Washington Seattle Data Science Professor Sundar Srinivasan
- Collected data of 1200+ matches through Kaggle & by web-scraping ESPN CricInfo website with Python
- Found probability of Cricket batsman getting out using length/speed/etc. of ball
- Trained and hyperparameter tuned Random Forests & Neural Networks
- Wrote 9-page research paper addressing my approaches and results

SparkSIP
Remote
Machine Learning Intern
Jun 2022 - Sep 2022

- Classified DNA electrical signatures to their DNA code using Random Forest models, Neural Networks, and SVM
- Presented progress to 2 University of Washington Seattle Professors using PowerBI
- Wrote in-depth research paper summarizing my methods and results

Project Sidewalk - Makeability Lab at the University of Washington Seattle
Seattle, WA
Web Development & Machine Learning Intern
Apr 2022 - Sep 2022

- Fixed 15-20 bugs involving JavaScript, Scala, CSS, and HTML
- Managed GitHub repository with a 40-member team
- Cleaned data using Excel & Python and presented insights to computer vision team

Skills

Web Development:	Bootstrap, React, Streamlit, EJS, Flask, Node.js, Express.js, Django, SQL, MongoDB
Data Science:	Python, PowerBI, Pandas, Numpy, Tensorflow, Scikit-learn, Matplotlib, Plotly
Additional:	Java, C++, C#, Visual Studio Code, Jupyter Notebooks, Google Colab, Kaggle

Projects

Weakness Detector Research *Pandas, Numpy, Scikit-learn*   https://tinyurl.com/mrxr95rr
Cricket application capable of finding weaknesses of cricket players based on past performances using Random Forest ML model with accuracy of 90%

ML Model Insights App *Streamlit, Pandas, Numpy, Matplotlib*   https://algo-insights.streamlit.app/
Application that allows users to quickly evaluate multiple ML models on an uploaded/chosen dataset both numerically and visually without writing any code

Morning Star Web Scraping Website *Flask, SQLite, Selenium*   https://tinyurl.com/mrx9mvya
An application that scrapes morning star to find data corresponding to the saved tickers in the database, inputted by the user. The website allows users to add/delete tickers and refresh the displayed data.

Valuable Courses

Machine Learning Specialization (Coursera) Learned ML algorithms like Gradient Descent, models such as Neural Networks, and Dimensionality Reduction principles, using multivariate calculus   Aug 2022

The Complete 2022 Web Development Bootcamp (Udemy) Gained hands-on expertise in frontend development (Bootstrap, React), backend development (Node.js, Express.js, EJS), and databases (SQL, MongoDB, Mongoose)   Dec 2022

Education

Cornell University
Ithaca, NY
Computer Science in the College of Engineering, GPA - 3.87
May 2026