Mina Mehdinia

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SUMMARY

A highly driven and analytical professional seeking a data scientist position that leverages my expertise in quantitative analysis, data mining, and machine learning. With a robust foundation in math, statistics, Python, R, and internship experience, I am confident in my ability to deliver valuable insights and drive data-driven decision-making across various industries. My versatility and adaptability make me an excellent fit for diverse teams and roles, where I can leverage my skills to drive data-driven decision-making, enhance user experiences, and contribute to the development of innovative products through cutting-edge data analysis.

Education

Portland State University Portland, OR
BS in Data Science, GPA: 3.89 *2019 - Graduating June 2023*

Work Experience

Internship Summer 2022
Summer Institute in Bio-statistics and Data Science *UC Irvine, CA*

- Selected for a highly competitive program, ISI-BUDS 2022.
- Implemented statistical modeling of stress based on biophysical, contextual, and demographic features, with a modern methodology and practice of bio-statistics and data science.
- Developed a comprehensive data wrangling, exploratory data analysis and data cleaning on a large real-world dataset in R and Python.
- Worked in a team in a collaborative fast-paced environment, used Git for project management and versioning, communicated everyday work and presented the results to the faculties and stakeholders.
- The results are currently being prepared to be submitted to a peer-reviewed journal.

Research and Project Experience

Klamath river's water quality exploration May 2023
Portland State University

- Analyzed Klamath River at Keno and Miller data to assess the impact of weather and river flow on thermal stratification
- Conducted statistical analysis and hypothesis testing to identify significant factors affecting thermal stratification.
- Implemented generalized additive models, random forest and kmeans clustering for analysis and recommended the predictive models and features to the client.

Cherry Blossom - How age affects health Dec 2022
Portland State University

- Implemented web scraping in R to collect the data from the Cherry Blossom 10-mile running race from 1973-2022.
- Performed data cleaning and wrangling in R including handling missing data, reformatting variables, removing duplications, etc.
- Implemented exploratory data analysis to gain insights through various visualizations.
- Modeled the data using a Linear Mixed Effects (LME) model and found statistical relationship between age and physical fitness with respect to how fast people run.
- Worked with a small team of three, used Git for project management and versioning, communicated everyday work and presented the results to our supervisor

Food recommendation system April 2022
Portland State University

- Performed feature engineering and feature scaling to preprocess the data.
- Implemented K-means clustering algorithm and KNN regression algorithm from scratch, and compared the results to sklearn's implementation
- Worked independently throughout the project and communicated the process and results with my supervisor
- The final system recommends similar foods to user's food of interest, based on their nutrition information

End to end data-centric deep learning coin detection system Feb 2023
Portland State University

- Collected data using my smartphone of various US coins on different backgrounds and different lighting conditions
- Labeled the data using LandingLens platform to draw bounding boxes around different classes of coins
- trained a deep neural network for object detection and evaluated it's performance with regarding to data quality
- Used Pytorch to train a model and compared it's performance with LandingLens platform
- Worked independently throughout the project and communicated the process and results with my supervisor
- The final system detects various kinds of US coins and calculates the total amount of money in an image

Loan default prediction March 2023

Portland State University

- Performed dimensionality reduction using principal component analysis, and recursive feature elimination
- Developed predictive models using linear discriminant analysis, quadratic discriminant Analysis, generalized linear model, and KNN
- Worked with a small team of three, used Git for project management and versioning, communicated everyday work with the team and project supervisor

Relevant Coursework

Algorithms, Machine learning,Artificial intelligence, Intro to database management system, Data visualization in R, Data structures, Modern regression analysis, Statistical learning, Large-scale data algorithms, Data science consulting skills, Data science practicum, Computer science I & II, Intro to Unix, Calculus I - IV, Statistics I & II, Applied Linear Algebra I & II, Discrete Structures I & II.

Skills

- **Programming Languages:** Python, R, SQL, Bash, C++
- **Software, Tools, and Libraries:** Git, Linux, LaTeX, scikit-learn, pandas, numpy, PyTorch (elementary), matplotlib, seaborn, ggplot2, dplyr, tidyr
- **Data Science and Analysis:** Statistical analysis, Predictive modeling, Structured and unstructured data, Machine learning, Cluster analysis, Large language models
- **IDEs and Editors:** Jupyter Notebook, Colab, PyCharm, RStudio, Visual Studio Code

Additional information

US citizen, first-gen student