Sami Kamal

Livingston, NJ

Education

Rutgers University

Bachelor of Science in Computer Science & Cognitive Science

Sep. 2021 - Dec. 2025

New Brunswick, NJ

Relevant Coursework

- Data Structures • Decision-Making
- Deep-Learning
- Linear Algebra • Calculus II • Intro to Data Science
- Discrete Mathematics
- Computer Architecture

Technical Skills

Languages: Python, Java, C, JavaScript, HTML/CSS

Developer Tools: VS Code, Eclipse, Jupyter Notebook, Google Colab

Technologies/Frameworks: TensorFlow, Scikit-Learn, NumPy, Pandas, GitHub, LaTeX

Projects

Heart Disease Classification | Python, Scikit-Learn, Jupyter Notebook

May 2023

- Developed a machine-learning model capable of predicting whether or not someone has heart disease based on their medical attributes.
- Addressed a binary classification problem to predict the presence of heart disease (1 = heart disease, 0 = no heart disease).
- Utilized the Cleveland data set from the UCI Machine Learning Repository.
- Comprehensively evaluated the tuned Logistic Regression model, including precision, recall, F1-score, ROC curve, and AUC.

Bulldozer Price Regression | Python, Scikit-Learn, Jupyter Notebook

July 2023

- A machine-learning model capable of predicting the sale price of a bulldozer.
- Kaggle Bluebook for Bulldozers competition, including training, validation, and test data sets.
- Used Random Forest Regressor for the prediction task.
- Utilized RMSLE (Root Mean Squared Log Error) to measure the accuracy of predictions.
- Successfully built a predictive model for bulldozer prices with high accuracy, providing valuable insights for pricing decisions.

Multi-class Dog Breed Classification | Python, TensorFlow, Google Colab

August 2023

- Developed a multi-class image classifier using a neural network in TensorFlow for a challenging task of dog breed classification.
- Successfully addressed the problem of identifying the breed of a dog based on input images.
- Utilized Kaggle's dog breed identification competition dataset as the primary data source. Implemented deep learning and transfer learning techniques due to the unstructured nature of image data.
- Worked with a dataset containing 120 different dog breeds, requiring fine-grained classification.
- Executed predictions on a test set consisting of over 10,000 unlabeled images and provided probabilistic breed predictions.

Extracurricular

Delta Kappa Epsilon (Phi Chi Chapter)

Spring 2022 - Present

Rutgers University

- Led a chapter of 30+ members to work towards goals that improve and promote community service, academics, and unity.
- Volunteered at the Community Food Bank of New Jersey to provide meals for over 500 families.