Database Management Systems

Lecture 12

Azure Machine Learning*

Azure Stream Analytics*

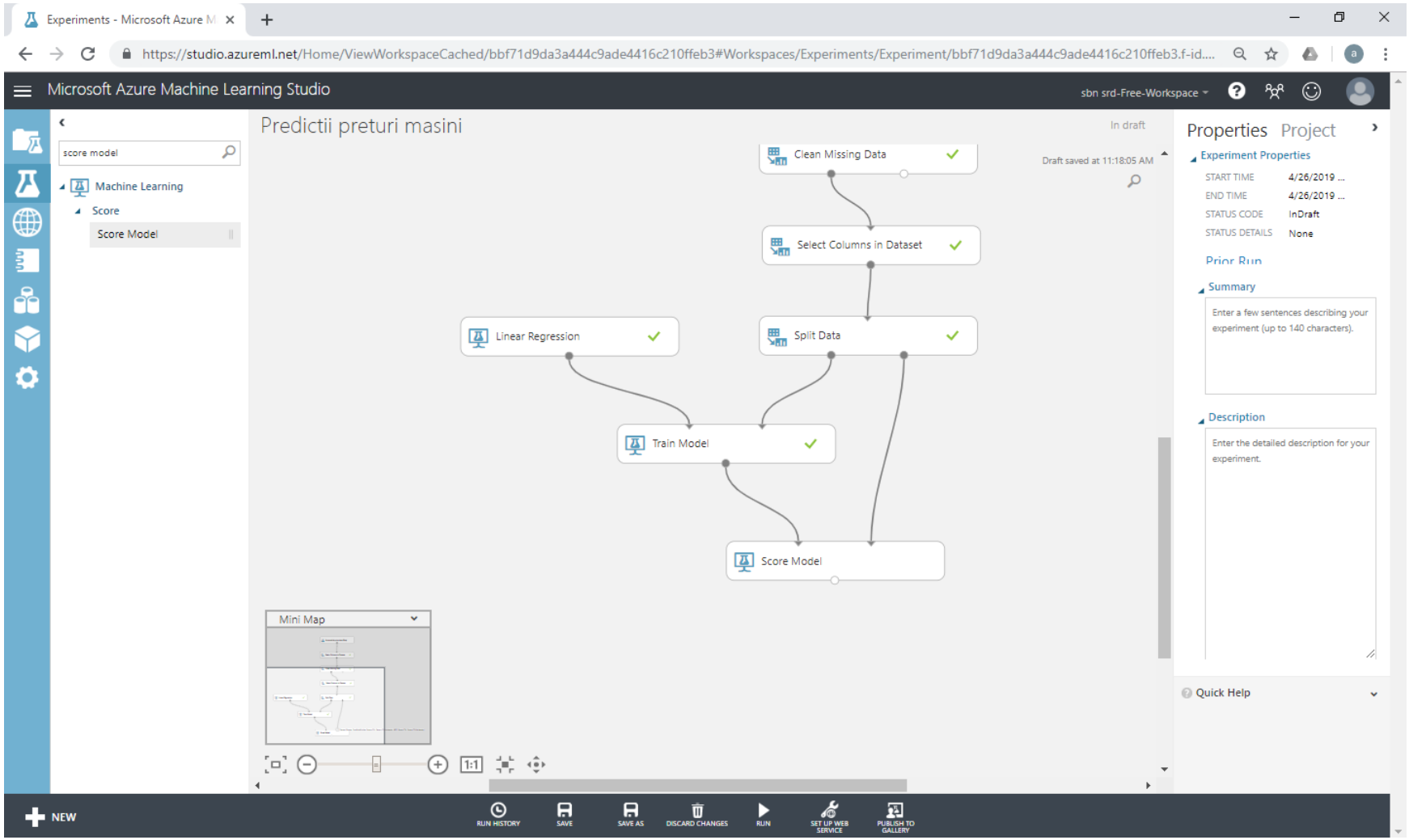
* not among the exam topics

Azure Machine Learning

Car Price Prediction

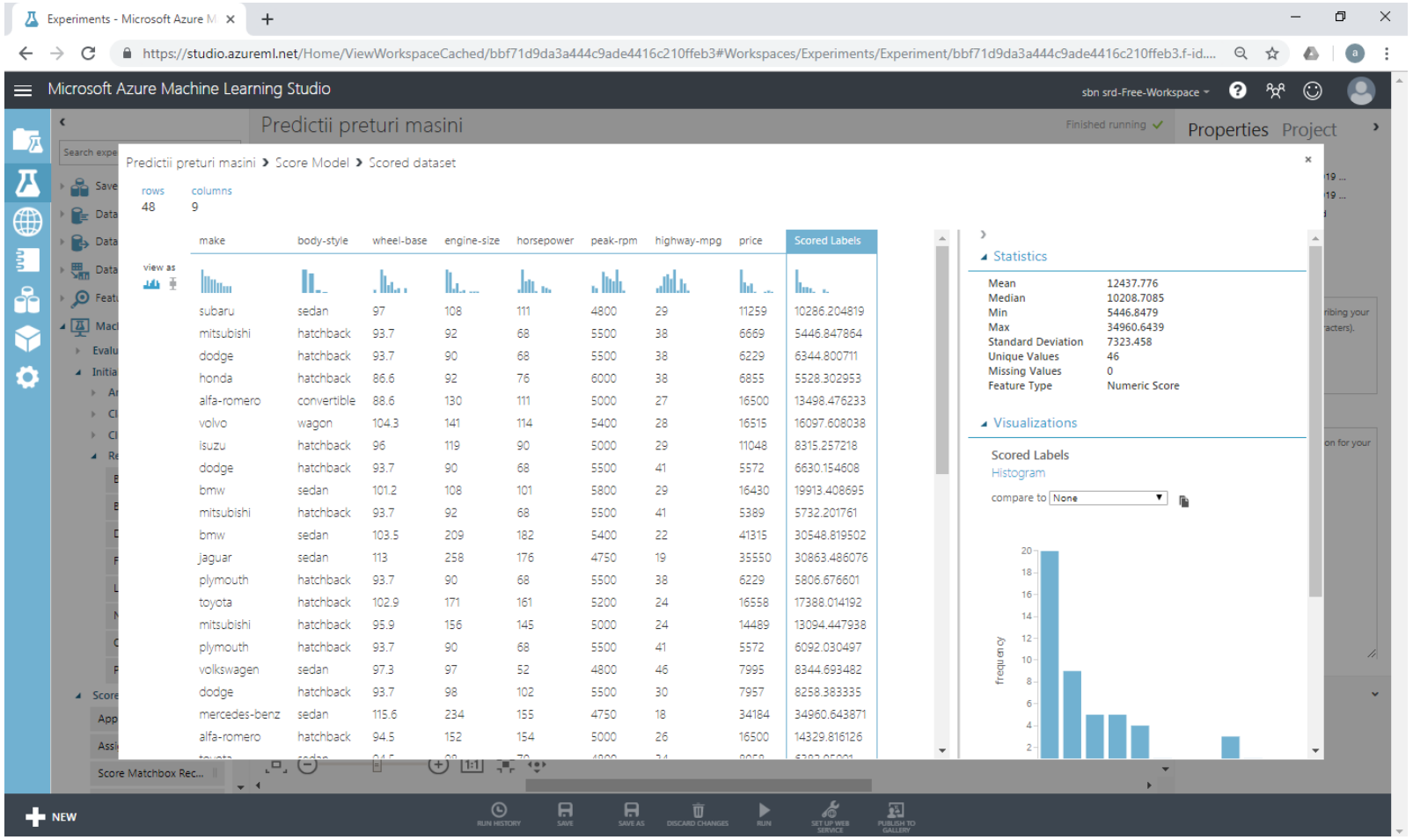
* testing the model - *Score Model* module

- *Run* experiment



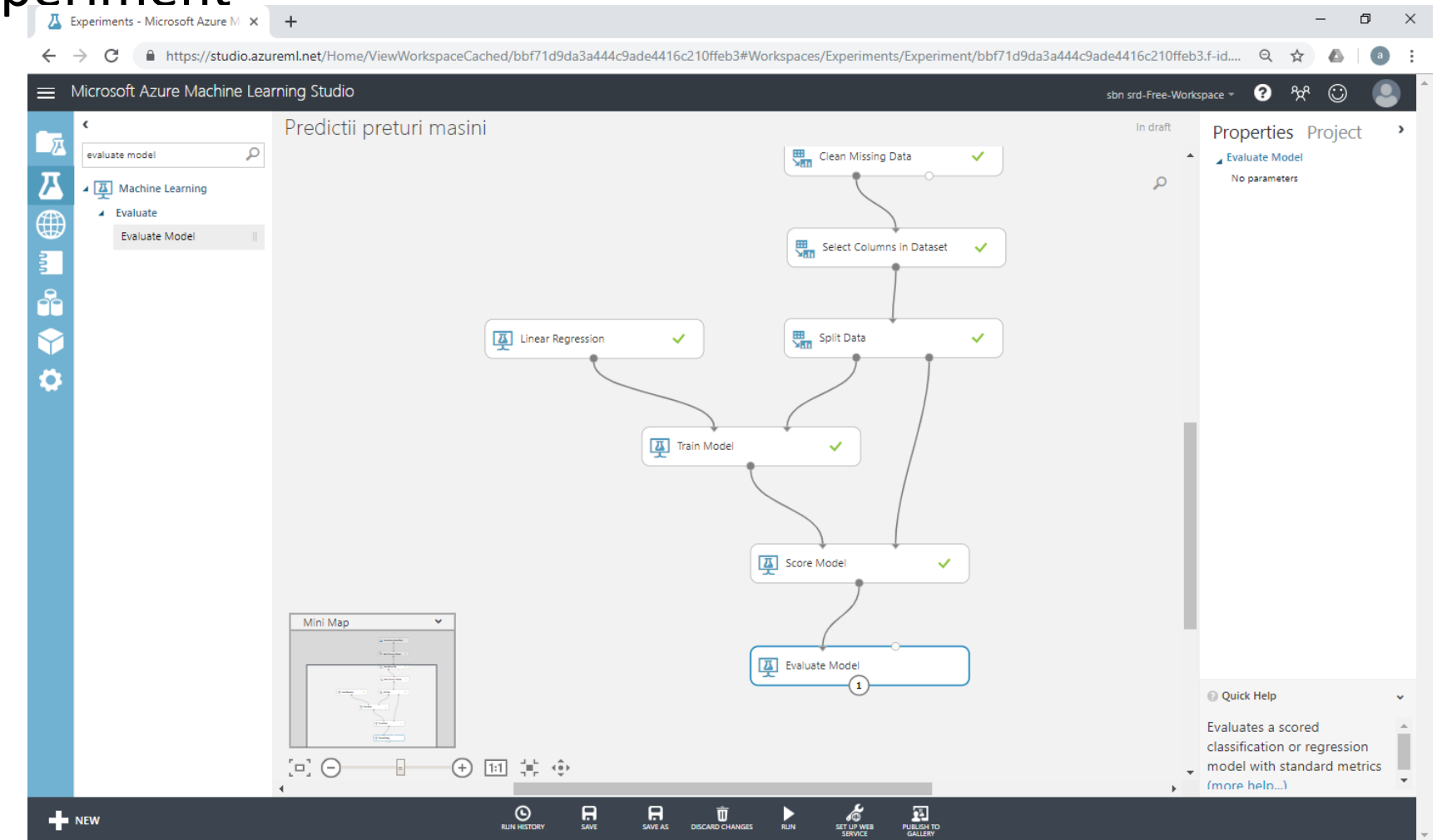
Car Price Prediction

* testing the model
  - *Score Model* output port-> *Visualize*
    - estimated / actual values for the *price* column



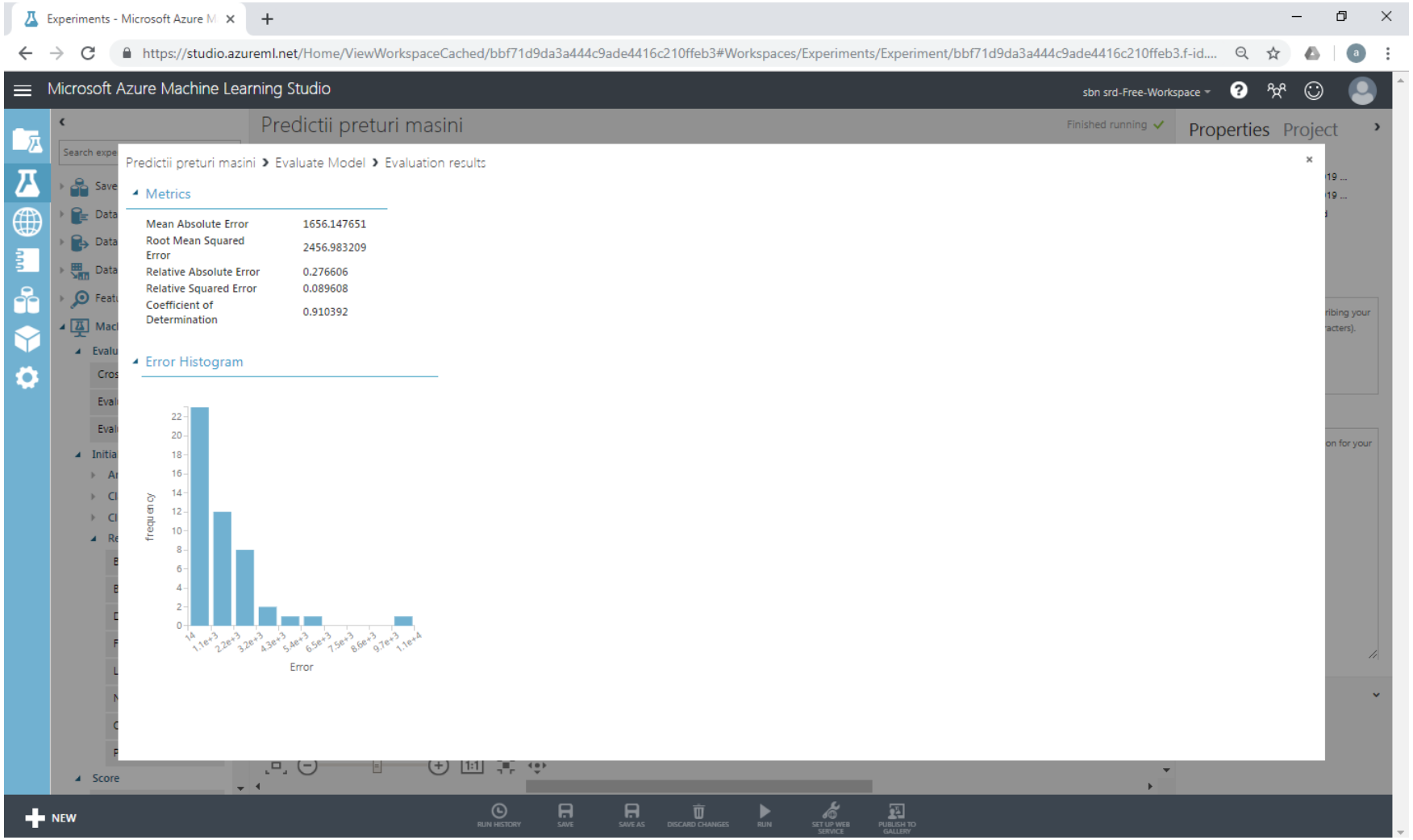
Car Price Prediction

* testing the model
  - *Evaluate Model* module
  - *Run* experiment



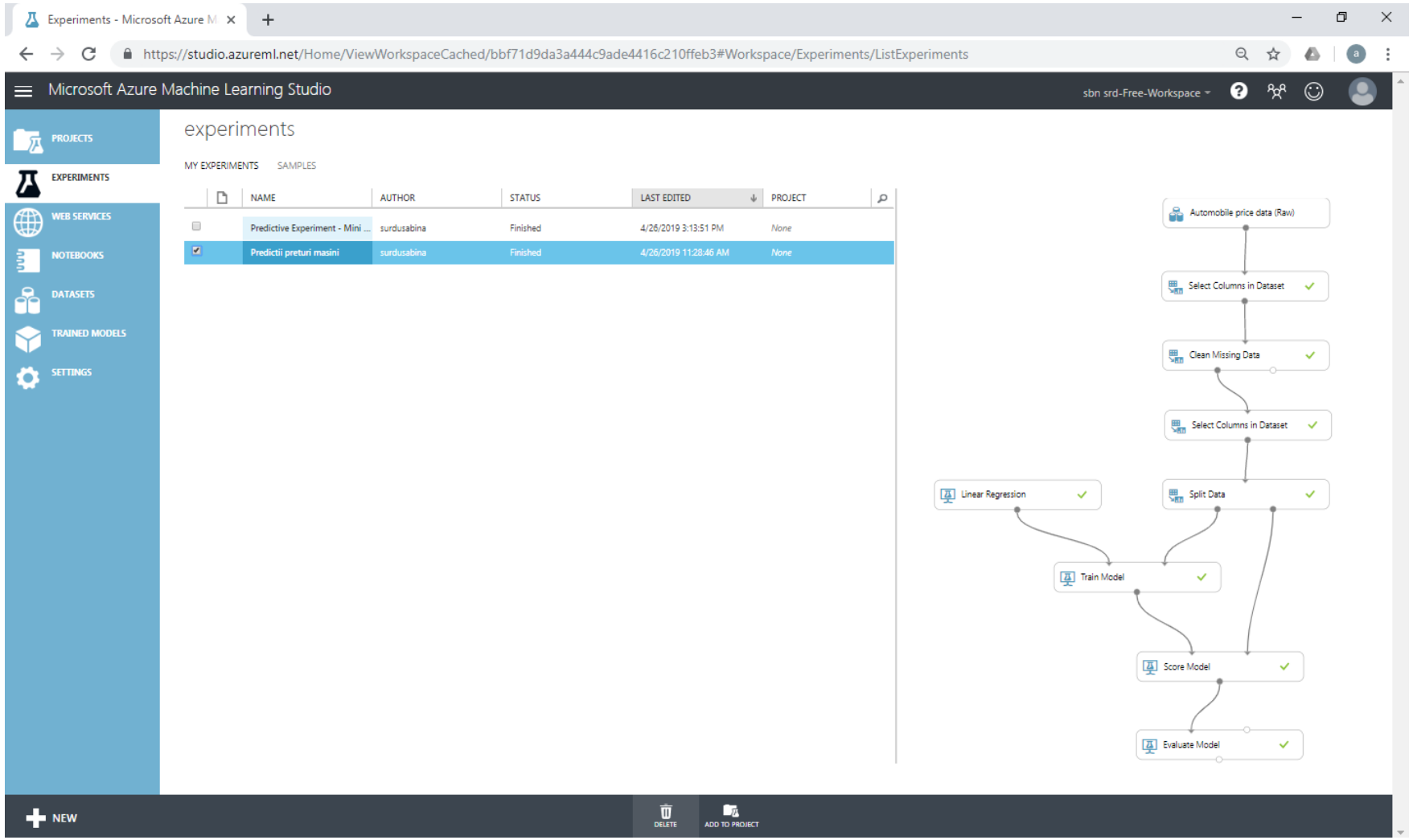
Car Price Prediction

* testing the model
  - *Evaluate Model* output port -> *Visualize*



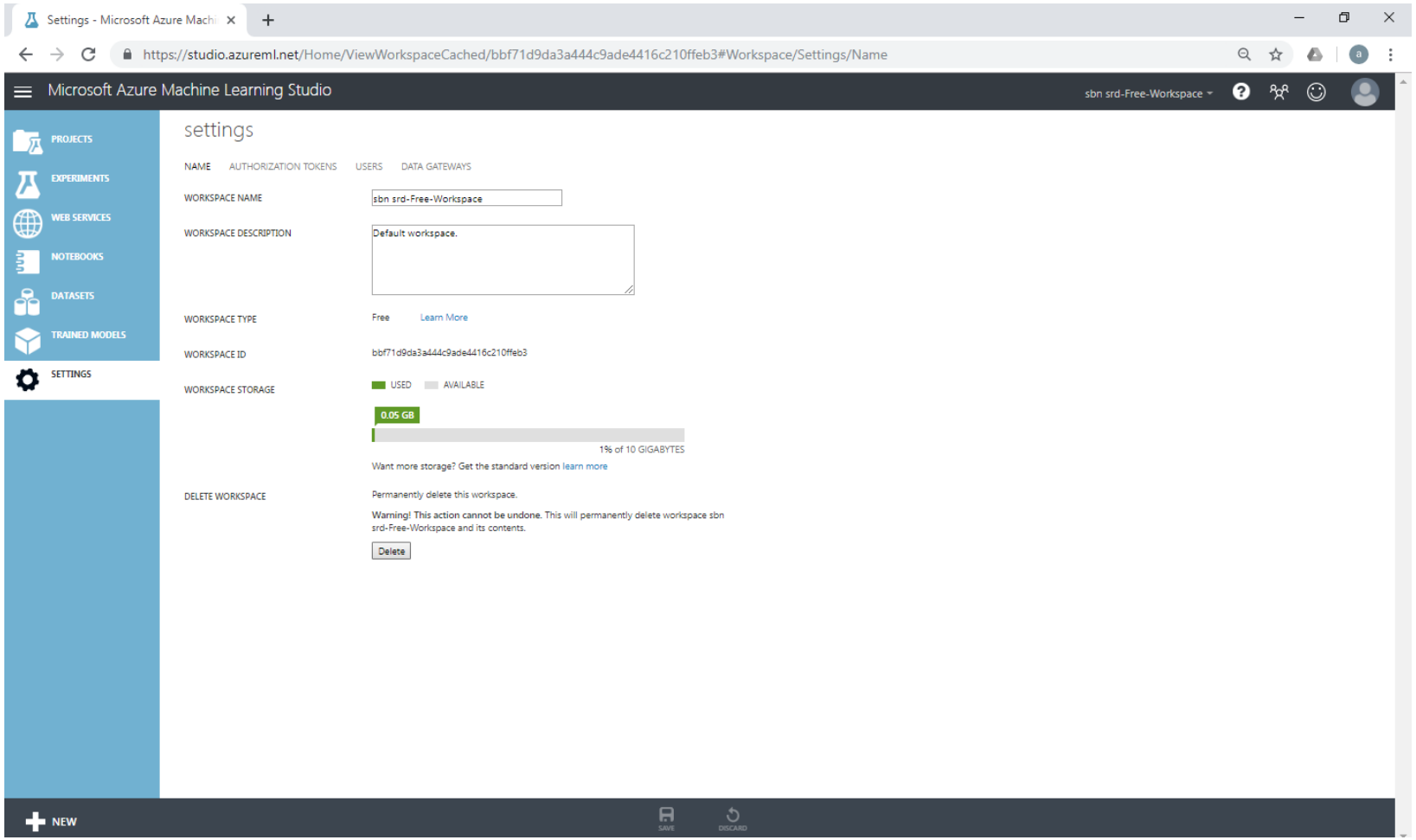
Car Price Prediction

* eliminate resources



Car Price Prediction

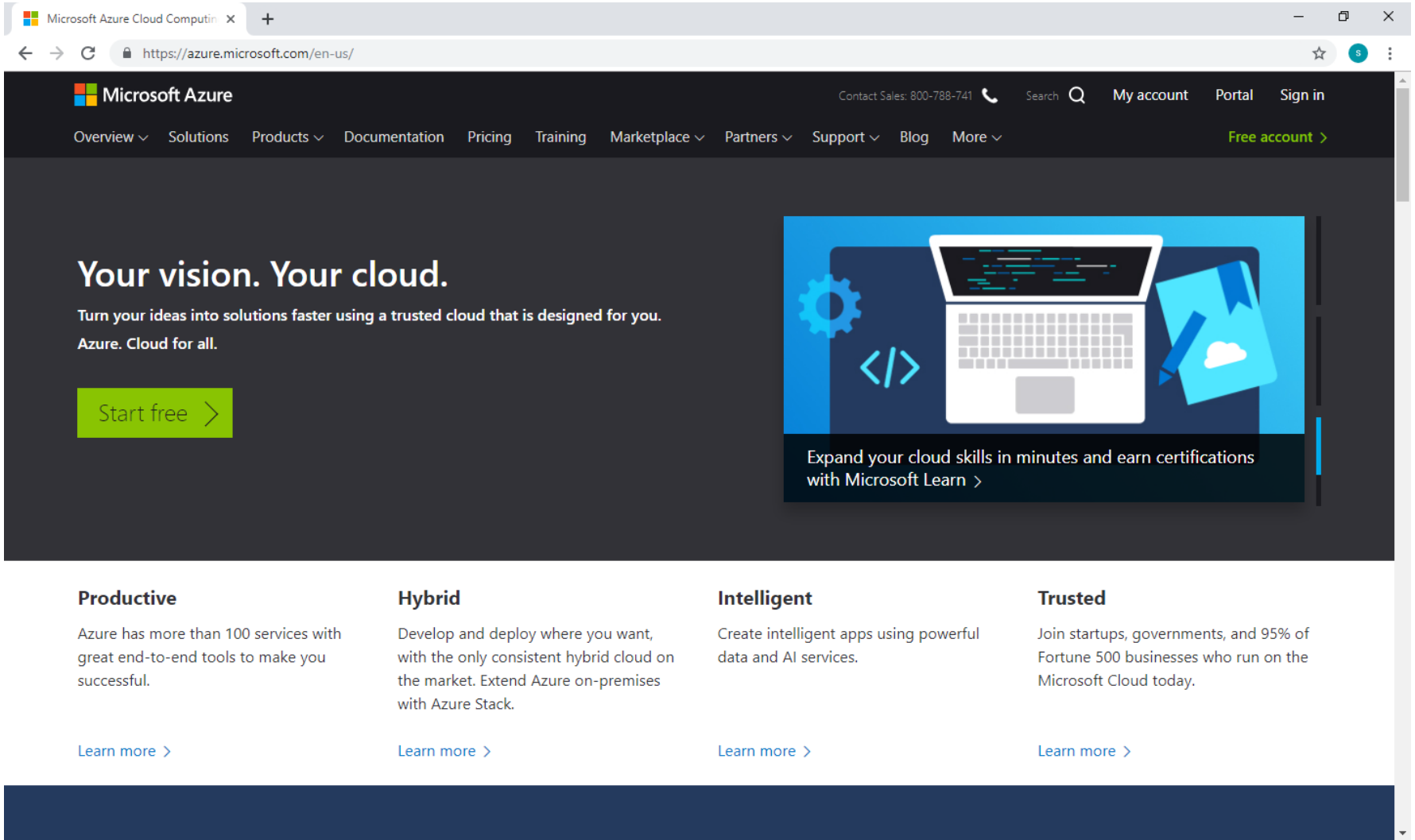
* eliminate resources
  - delete workspace: *Settings -> Delete*



Analiza sentimentelor
Azure Machine Learning și Azure Stream Analytics

Cont gratuit Azure (limitat) – Azure for Students

- portalul Azure
  - https://portal.azure.com/#home

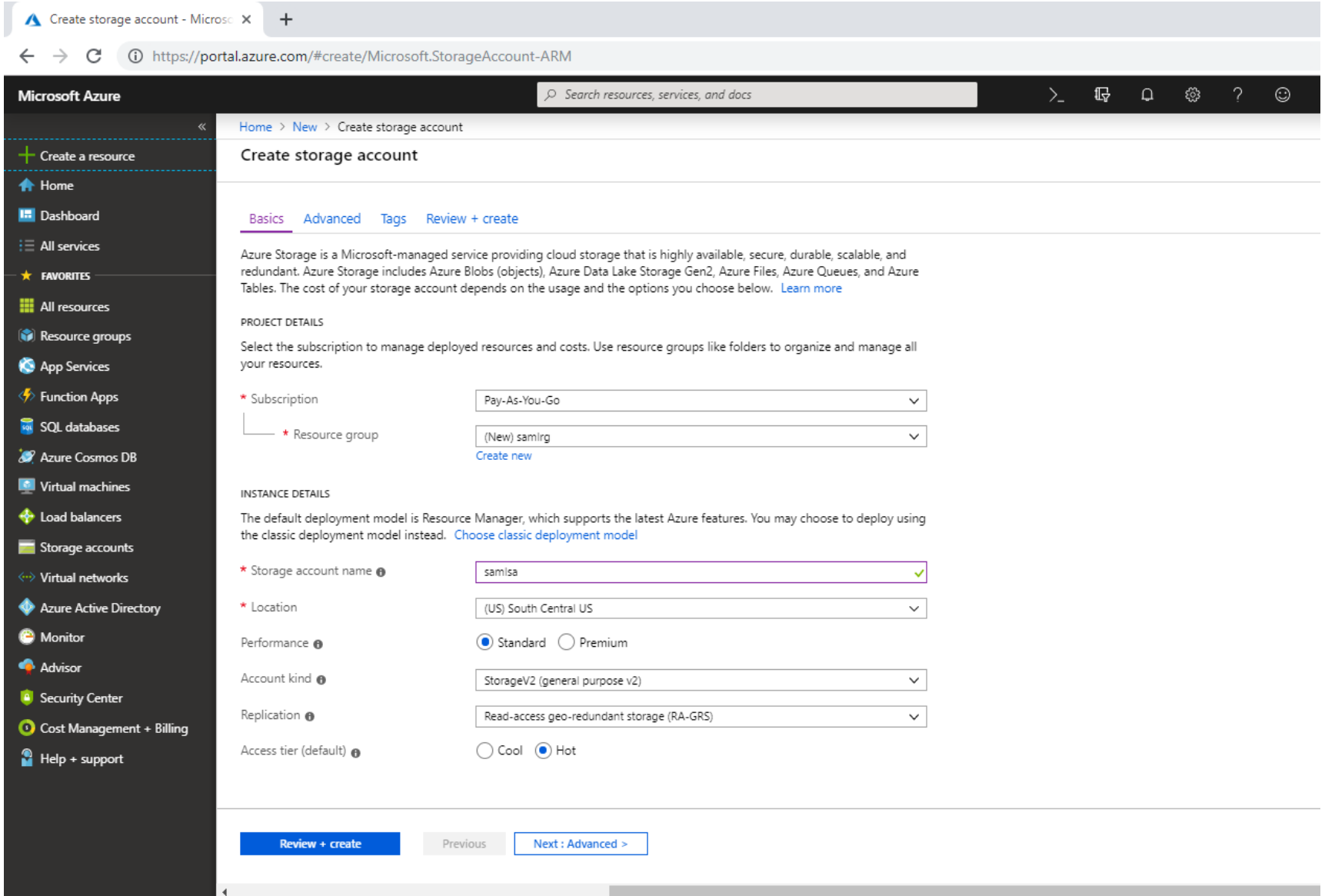


Analiza sentimentelor: Azure Stream Analytics + Azure ML

- input
  - fișier .csv cu tweet-uri încărcat în Blob storage
- publicare model pentru analiza sentimentelor ca serviciu web
- creare job
  - input - fișier .csv cu tweet-uri din Blob storage
  - output - alt fișier .csv în același Blob storage
    - pentru fiecare tweet se stochează sentimentul (*positive, neutral* sau *negative*) și probabilitatea ca tweet-ul să fie pozitiv
  - funcție Azure Machine Learning - apelare serviciu web ca o funcție pe fiecare tweet input

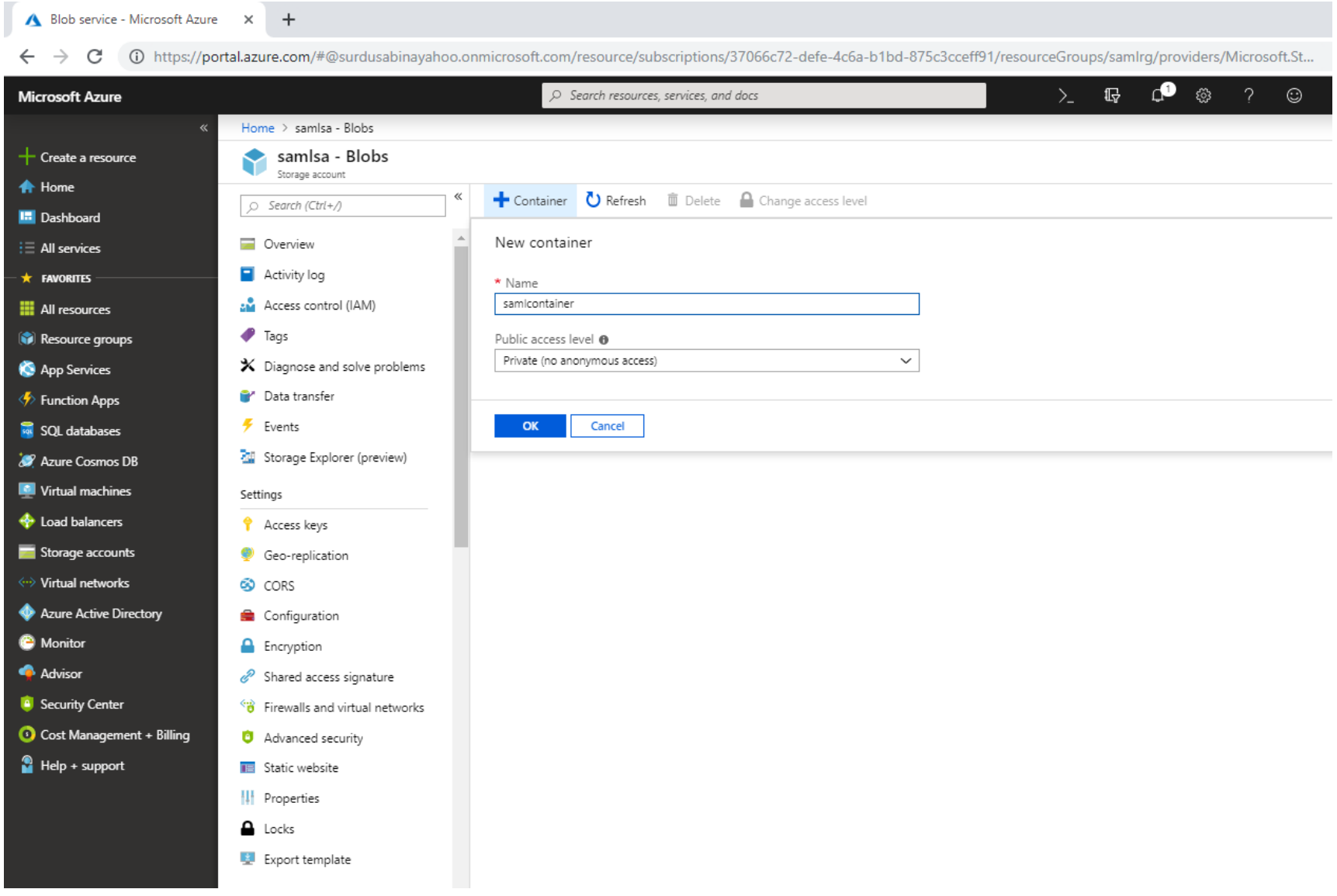
Input

** Create a resource -> Storage -> Storage account*



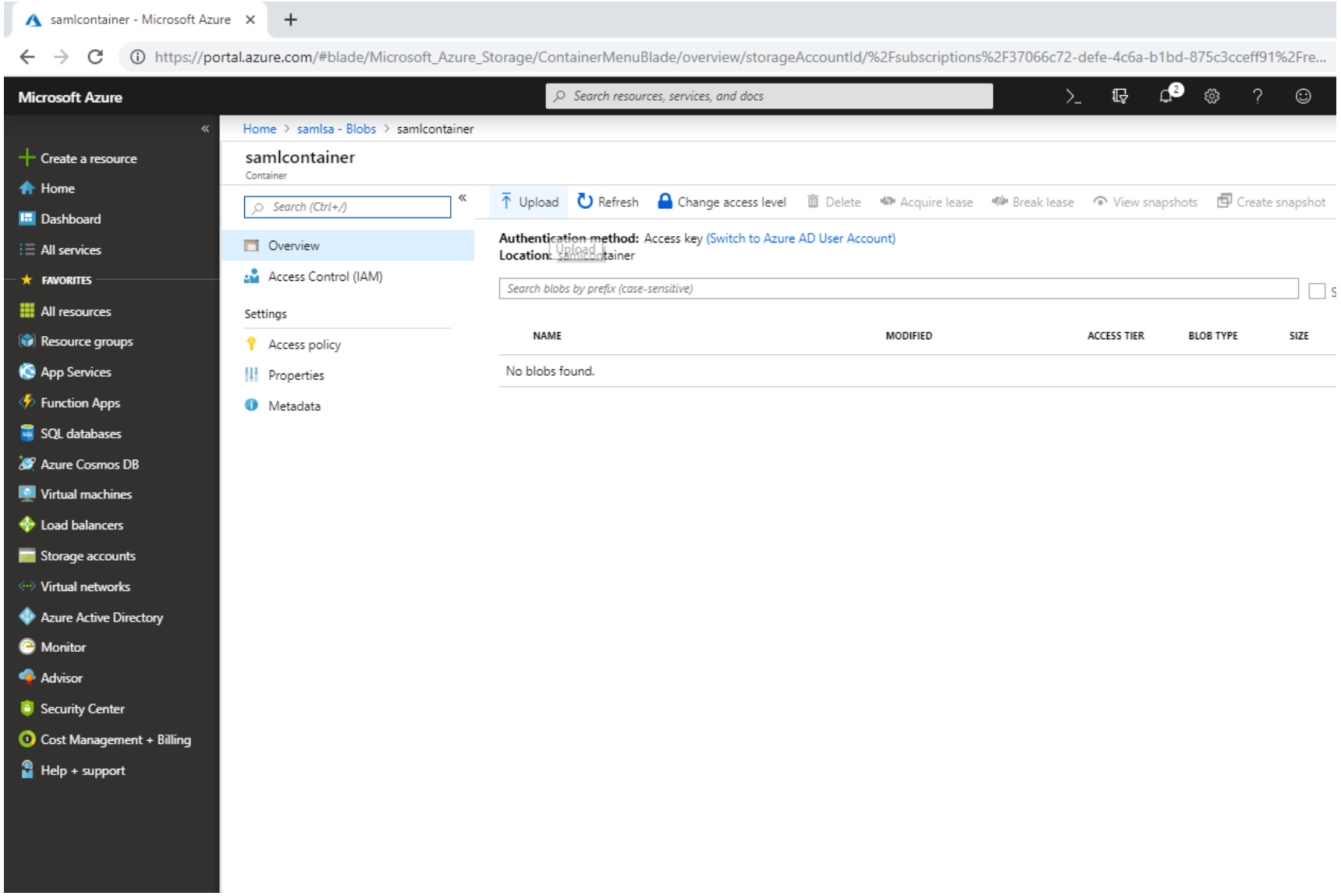
Input

* încărcare fișier -> *Storage account -> Containers -> + Container*



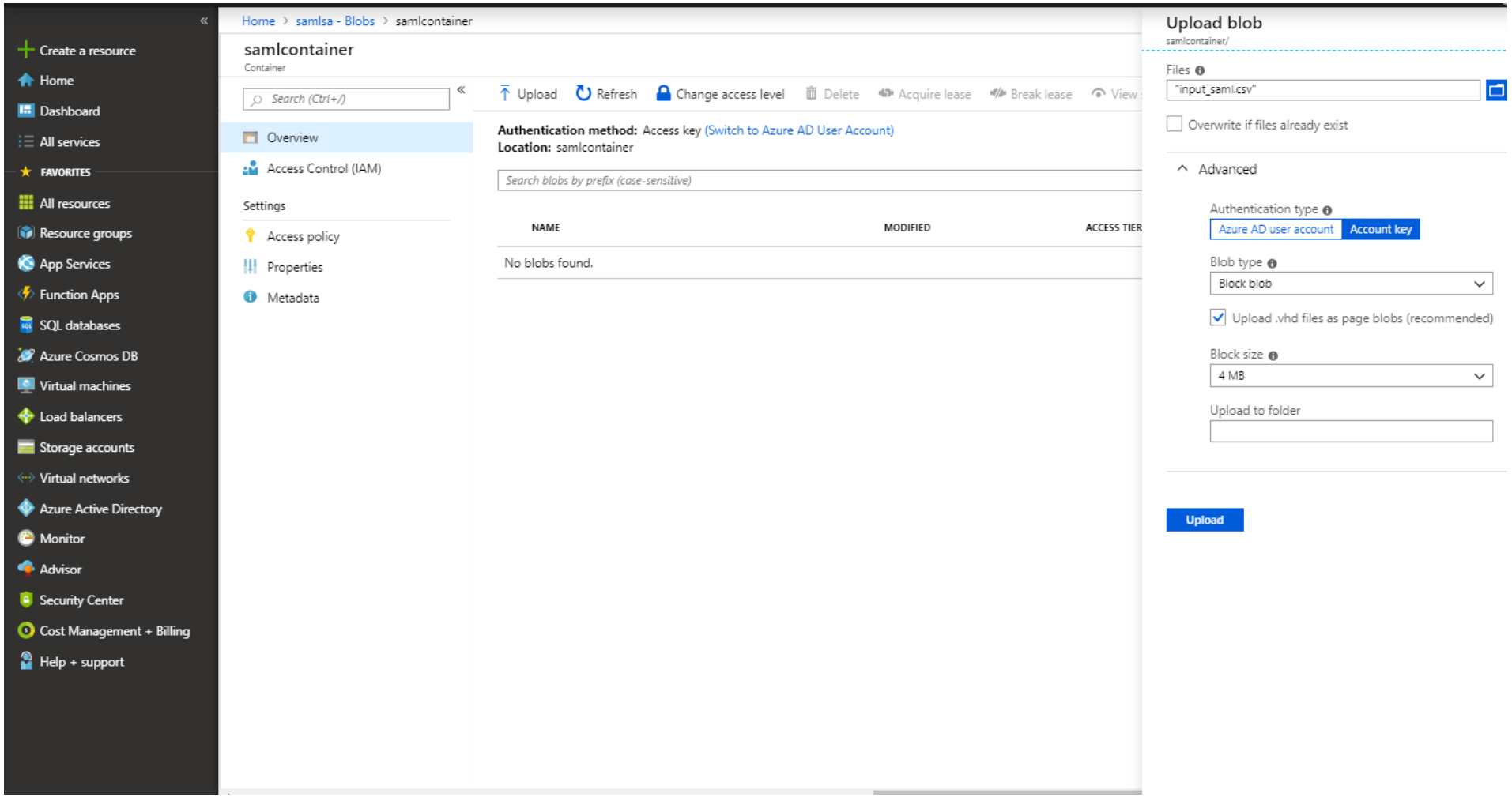
Input

* încărcare fișier -> *container -> Upload*



Input

* încărcare fișier -> alegere fișier -> *Upload*



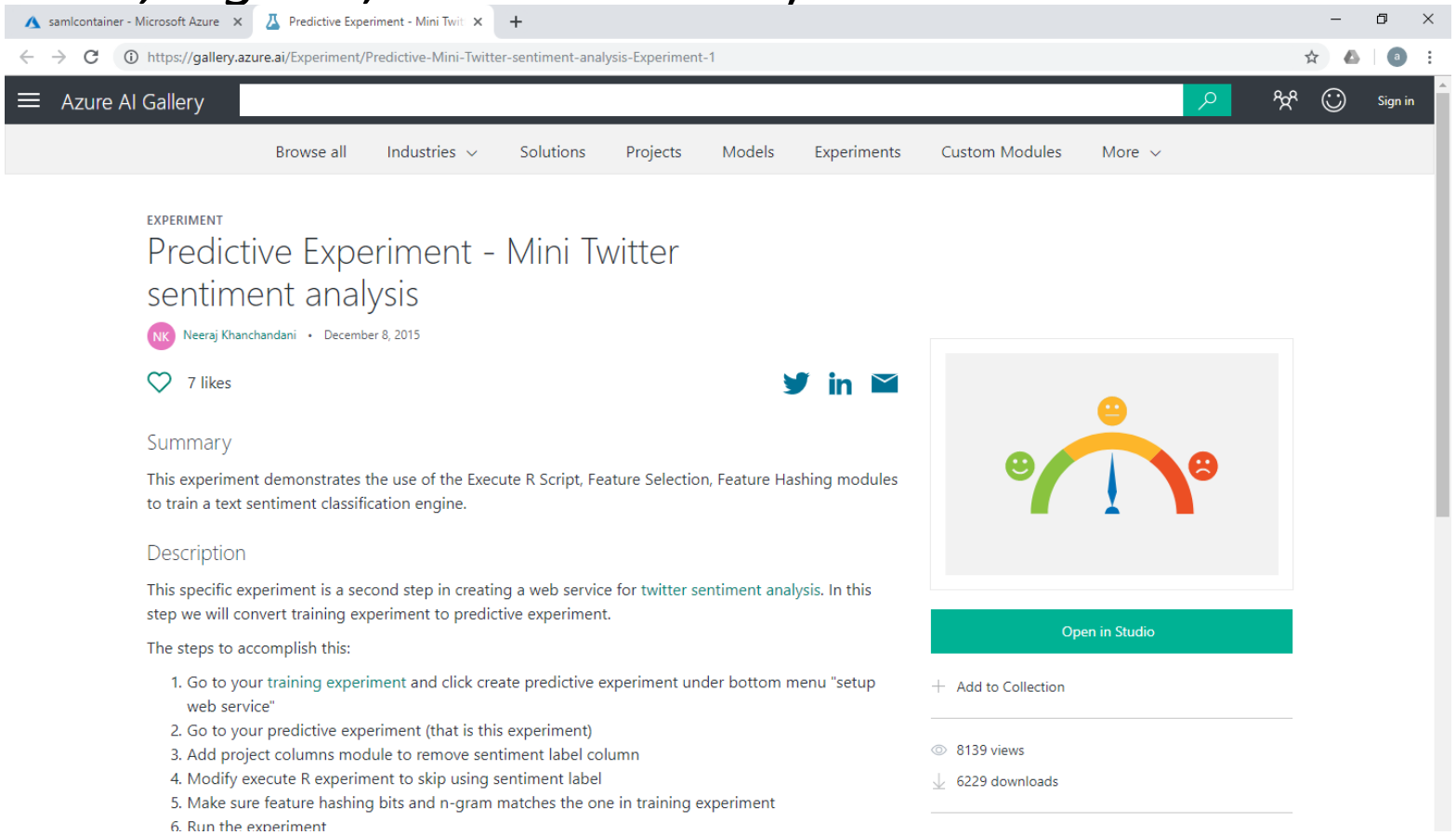
Input

* input_saml.csv

Text
They love ice cream
The sky is blue
Machine Learning is cool
Machine Learning is not cool

Model Machine Learning -> Serviciu Web

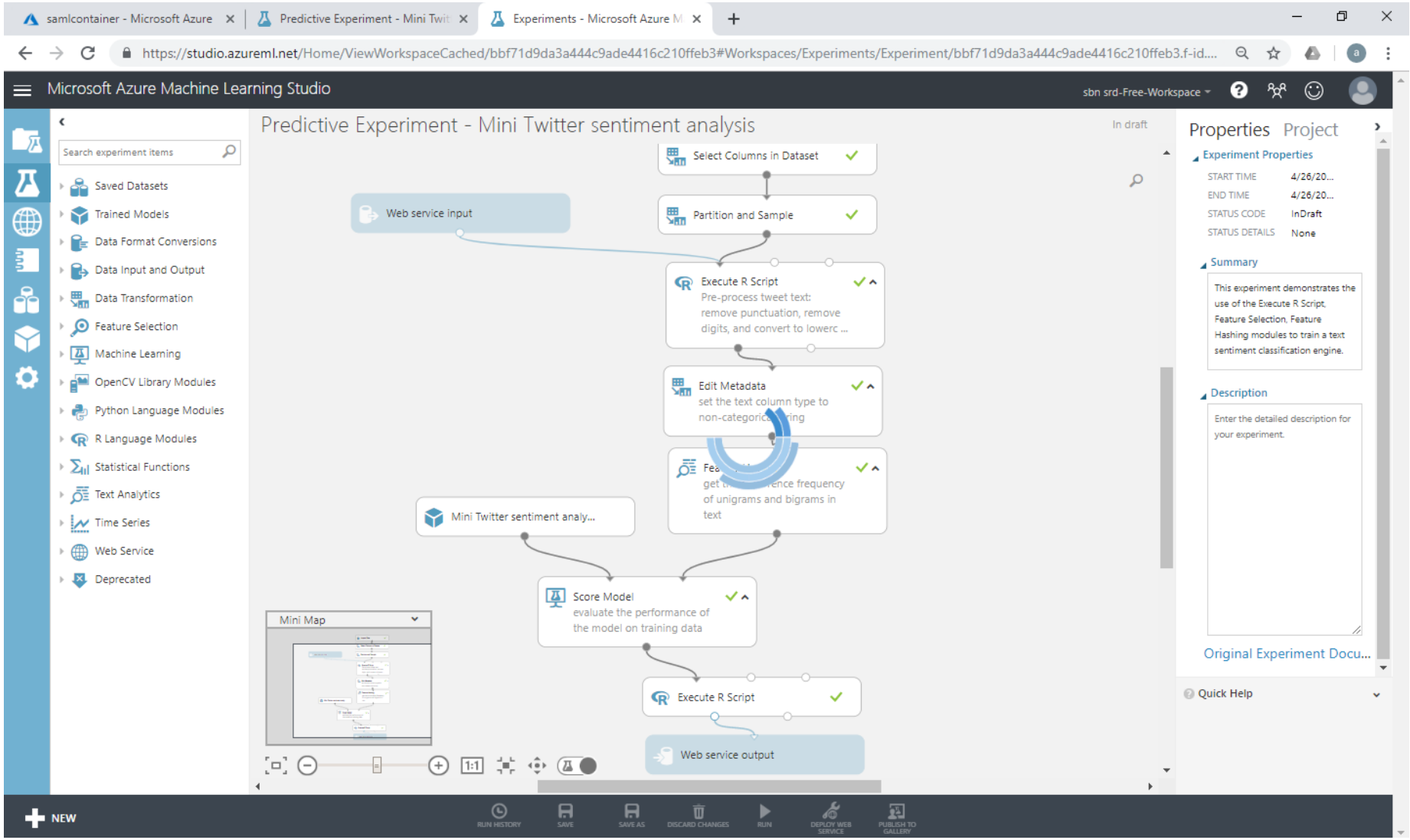
* model analiză sentimente (Azure AI Gallery)
  - https://gallery.azure.ai/Experiment/Predictive-Mini-Twitter-sentiment-analysis-Experiment-1
  - *Open in Studio, Sign in*, selectare locație



Model Machine Learning -> Serviciu Web

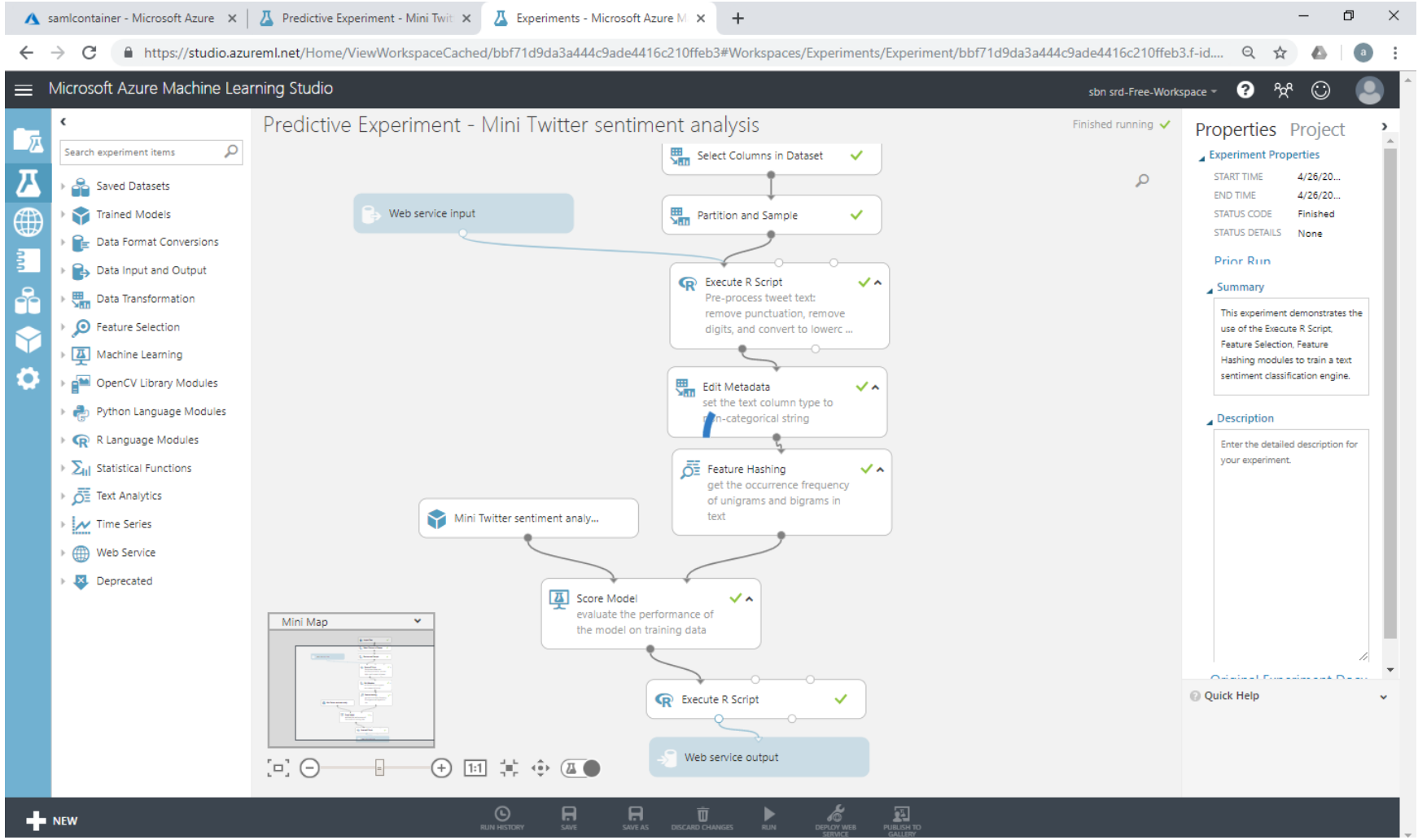
* model analiză sentimente

  - Run



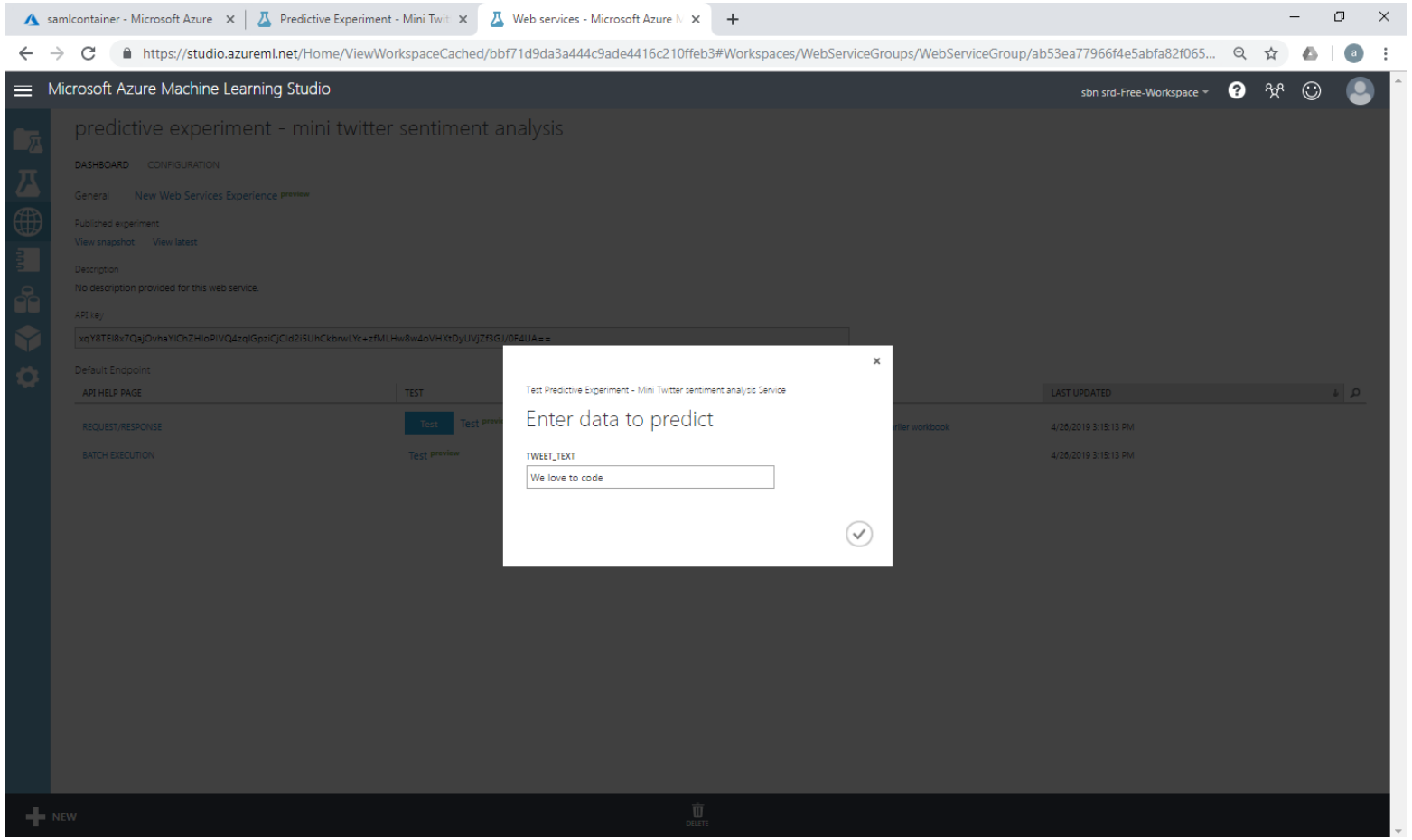
Model Machine Learning -> Serviciu Web

* model analiză sentimente
  - *Deploy Web Service*



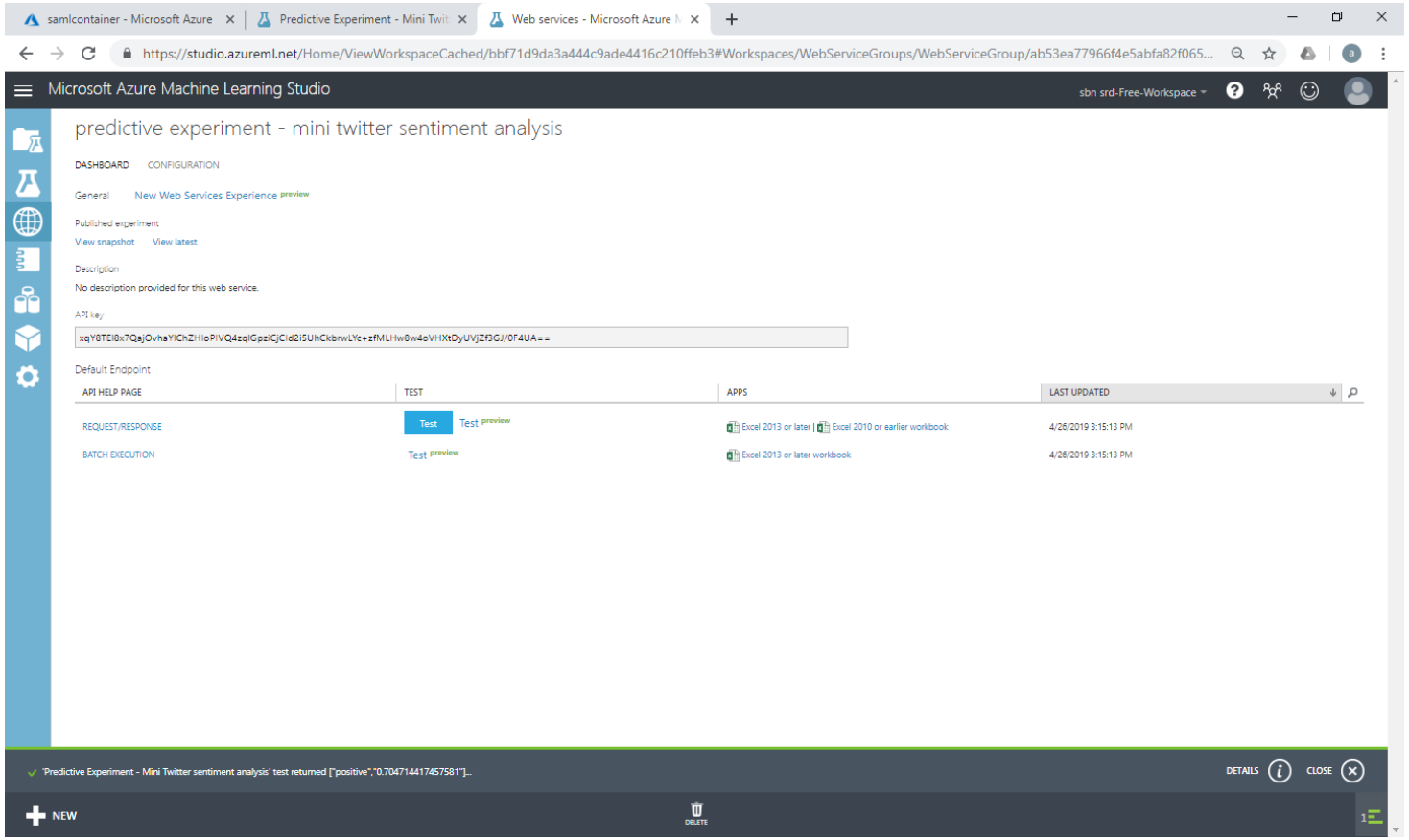
Model Machine Learning -> Serviciu Web

* model analiză sentimente
  - testare
    - Test -> text input



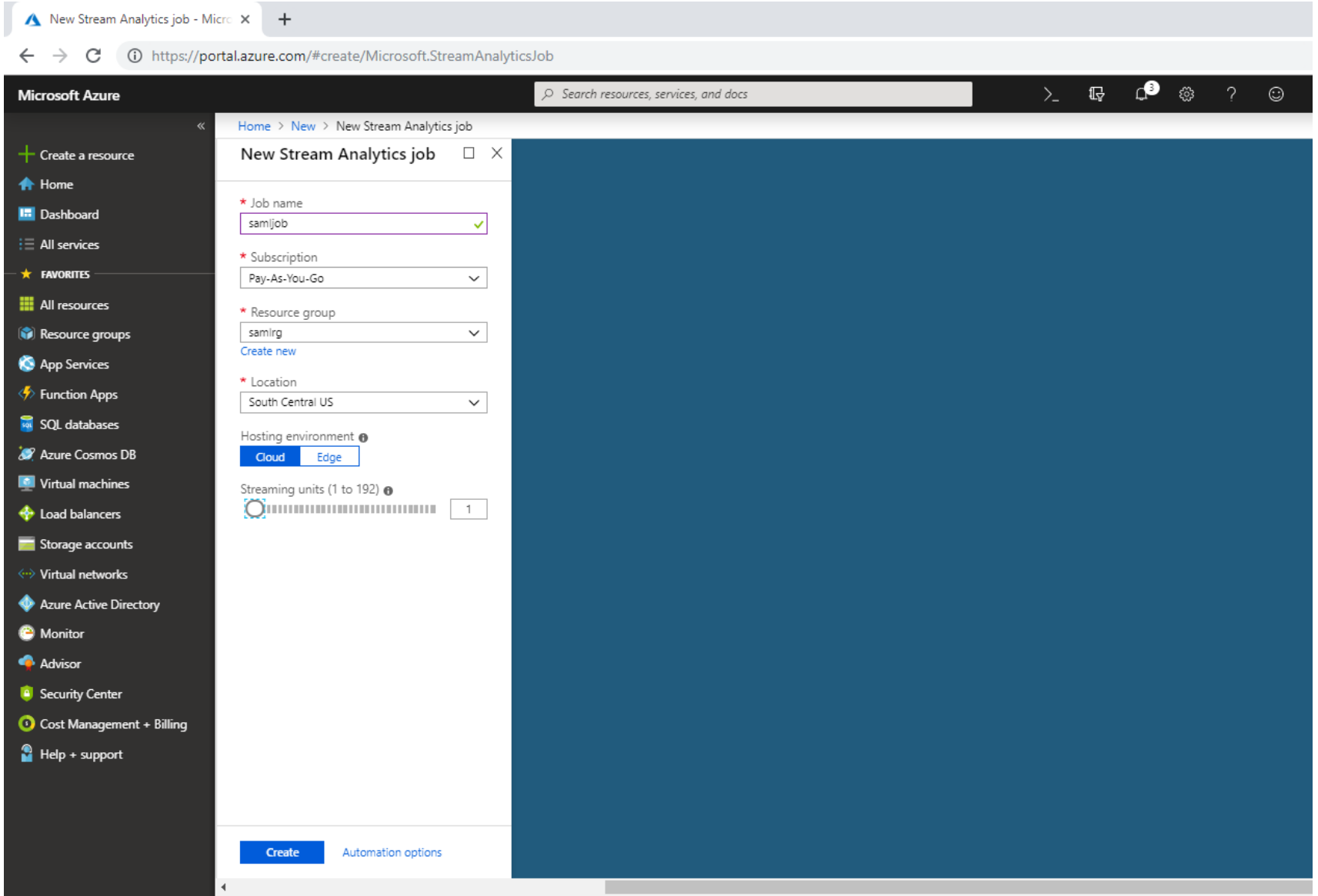
Model Machine Learning -> Serviciu Web

* model analiză sentimente
  - testare
    - rezultat
  - descărcare workbook Excel (*Excel 2010 or earlier workbook*) - conține cheie API și URL serviciu web



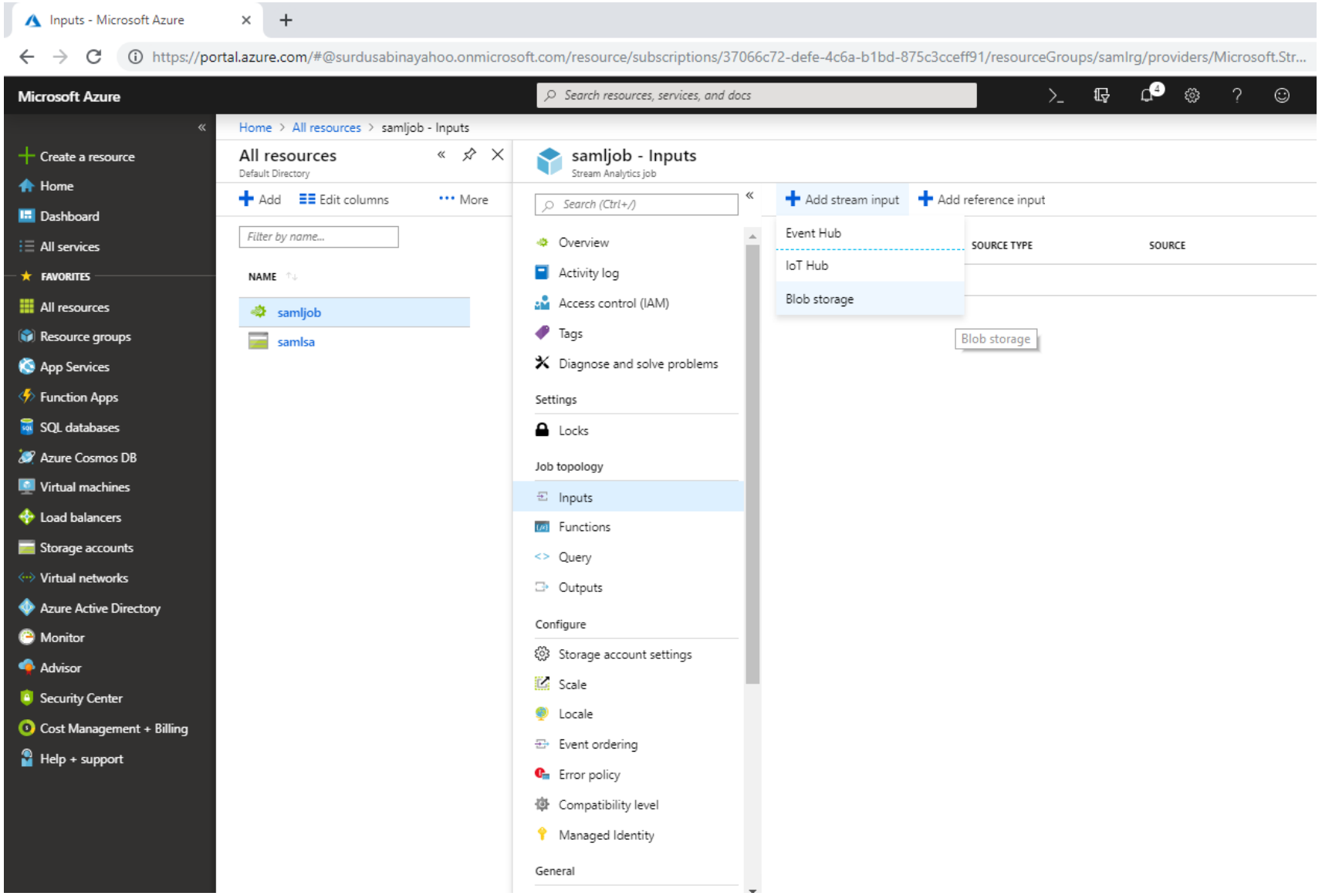
Job

** Create a resource -> Analytics -> Stream Analytics Job*



Job

* configurare input - fișier .csv încărcat anterior



Job

* configurare input
  - *Event serialization format -> CSV*