



## Global BusinessHackathon

**Company Name:** Technomile

**Title:** Discover and connect organizations with the right opportunities at the right time!

**Business Challenge Description:** Being in the Washington DC metro area, the most dominant force around us is the federal government. Majority of the businesses around the DC work with the government, and the government has been on a technological innovation push with Open Government API, Cloud Adoption, and many other strategic initiatives.

One such initiative is [usaspending.gov](https://usaspending.gov), where all the US government spending data is available. But it is challenging for companies that want to work with the federal government to identify opportunities which match their capabilities, and what work they should pursue where their chances of winning are highest. This project will match the companies with the opportunities and also make recommendations on keywords to focus on, for their business development efforts.

### **Solution Requirements:**

The solution requirements are to develop a neural network for sentiment analysis using Keras or similar Deep Learning libraries to match companies with opportunities. Data for analyzing will be provided.

### **Evaluation Criterion:**

The model should use various government contractors to predict those opportunities that these companies should pursue and the keyword phrases that they should look for in the government data. Upon successful execution, the model should generate recommended opportunities and keywords for each company depending on its capabilities.

**Tools and Technologies:** AWS, Python, Keras, TensorFlow, MongoDB

### **Frequently Asked Questions**

1. Development Language
  - a. Python or Java
2. Do I need AWS account
  - a. Yes, you will need a AWS student account. If you do not have necessary credits, we can provide a development environment access.
3. Where can I get the dataset
  - a. Dataset in MongoDB format will be provided.
4. Do I need to know AI/ML
  - a. Yes, some previous experience in doing some AI/ML modeling is required.

### **Resources and References**

1. <https://usaspending.gov>
2. <https://sam.gov>