

Contributing to Social Media Macroscope Project

Introduction

[added_eScience_2019_SMM.pptx](#)

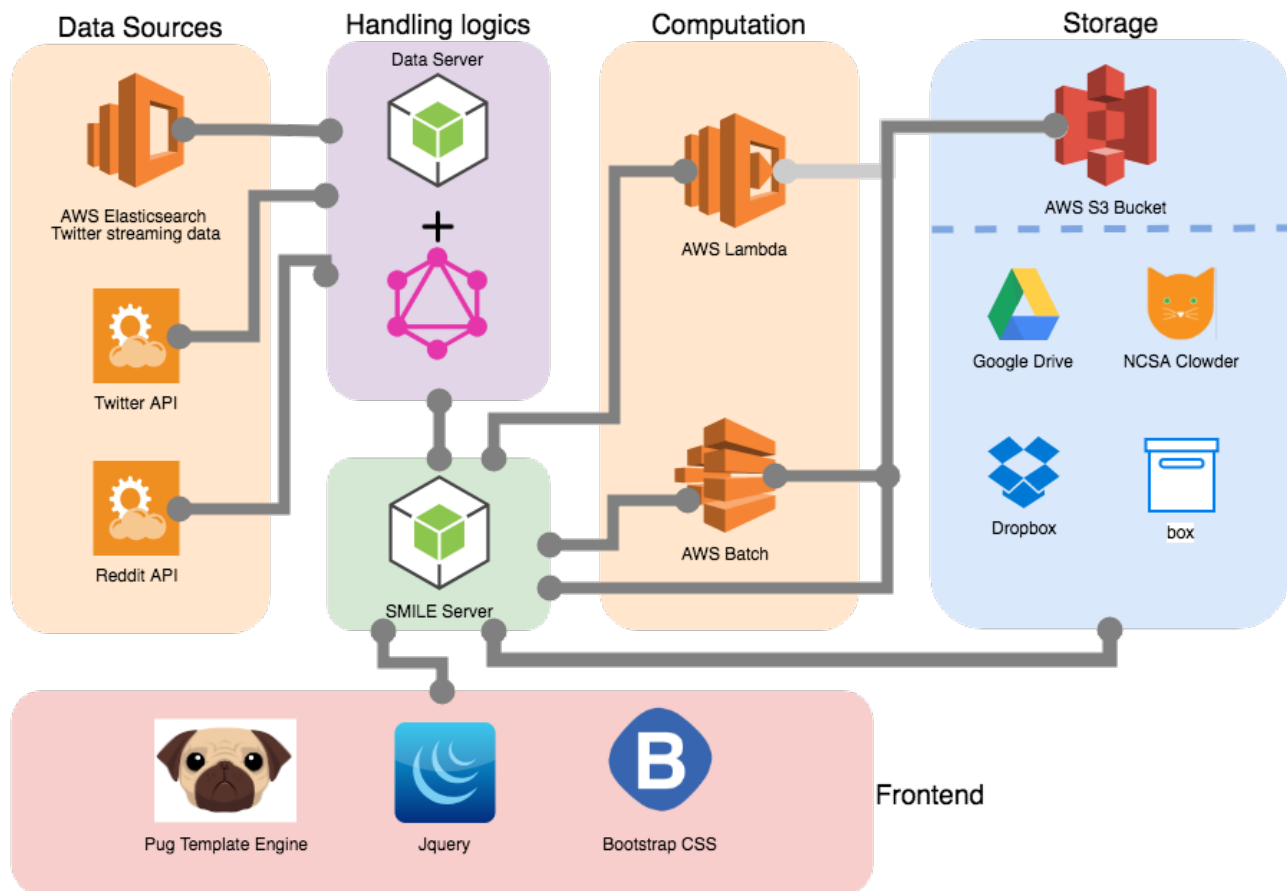
Getting start

- **Register** on <https://socialmediamacroscope.org> and start trying out the tools
- **Code base:**
 - <https://opensource.ncsa.illinois.edu/bitbucket/projects/SMM> (for development)
 - <https://github.com/IllinoisSocialMediaMacroscope> (mirrored from bitbucket)

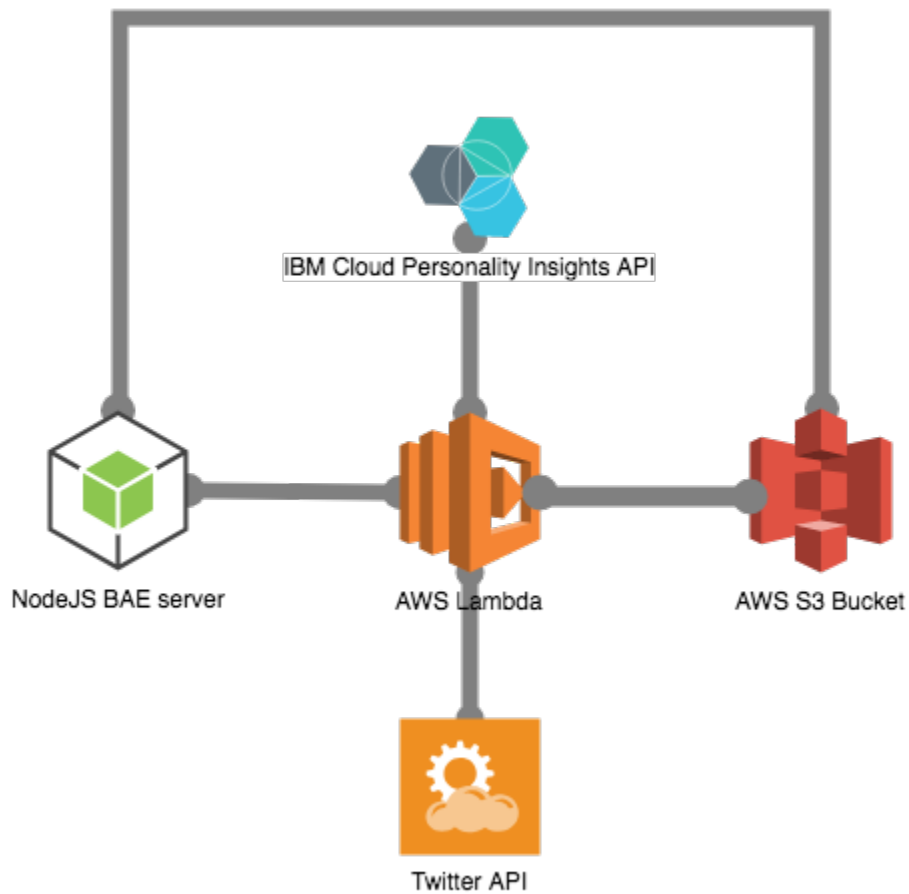
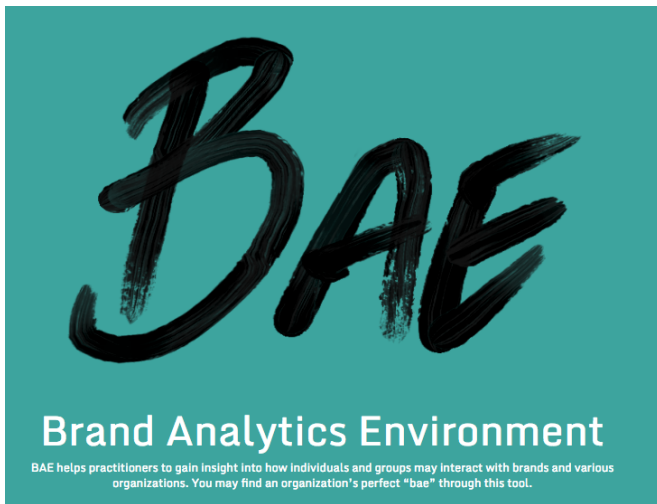
Contributing to existing tools

- SMILE





- **SMILE is a comprehensive social media data collecting and analytics platform.**
- **Defining new social media platform data source**
 - how to authenticate and authorize
 - what's the data structure like
 - what is the platforms policy on data collection and ownership
 - learn GraphQL and define your own schema
- **Adding new analytics metrics**
 - currently we have Sentiment analysis, NLP Preprocessing, Topic modeling, Automated phrase detection, Name Entity Recognition, and Twitter Network analysis
 - you can bring in your own analyses, ideally in Python, but can be any programming languages.
 - Alternatively, in each of the above mentioned analyses, if you have specific algorithms or innovated ways to perform that analysis, you are welcomed to bring in those
 - Useful links:
 - [Guidance for writing configuration file in SMILE](#)
 - [Template for submitting Python algorithm](#)
 - [SMILE endpoints](#)
- **BAE**



- PAHO COVID19 dashboards
- **This is the newest project we are working on currently!**

Other aspects that you could contribute to:

- **UI/UX design**
- **Testing and Monitoring**
- **Exploring new computation platforms and resources**
 - Other cloud computing platform capability other than AWS; for example Azure since we have allocation for that
 - Container orchestration - one of the direction we are exploring is to dockerize all the components of the tools, and we plan to scale it up using kubernetes
 - Exploring the capability of existing analytics and integrate to the tools: such as Google Trend API, IBM watson, Tableau and etc
- **Community Engagement:**
 - How to advertise SMM project and tools to the community; How to find our target audience and satisfy their needs
 - Workflow or standards to include new data source and algorithms

Writing your own tools

- **Could be anything novel that utilizing social media data and analyses; preferably using opensource libraries and algorithms that associates with academic publication**
- **Need to have a Graphic Interface**
- **Plan ahead: Need to communicate with Hubzero (where all the tools have been hosted) to decide if the technology stack you plan to use is compatible with their platform**