STREAMLIT

- **Streamlit** is a tool to create Web-based Dashboard with a focus for the Machine Learning scientist or engineer
- Streamlit is an open-source app framework
- Specifically, **Streamlit** uses **HTML**, **CSS**, and **Javascript** but does not need the developer to know **HTML**, **CSS**, and **Javascript**.
- From https://www.streamlit.io

Streamlit

Compatibility with Major Frameworks / Libraries

scikit learn

Altair

bokeh

LaTeX

Keras

plotly

OpenCV

Vega-Lite

PyTorch

NumPy

seaborn

DECK.GL

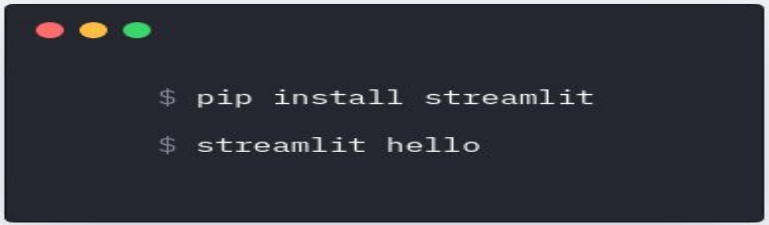
TensorFlow

python

matplotlib

pandas

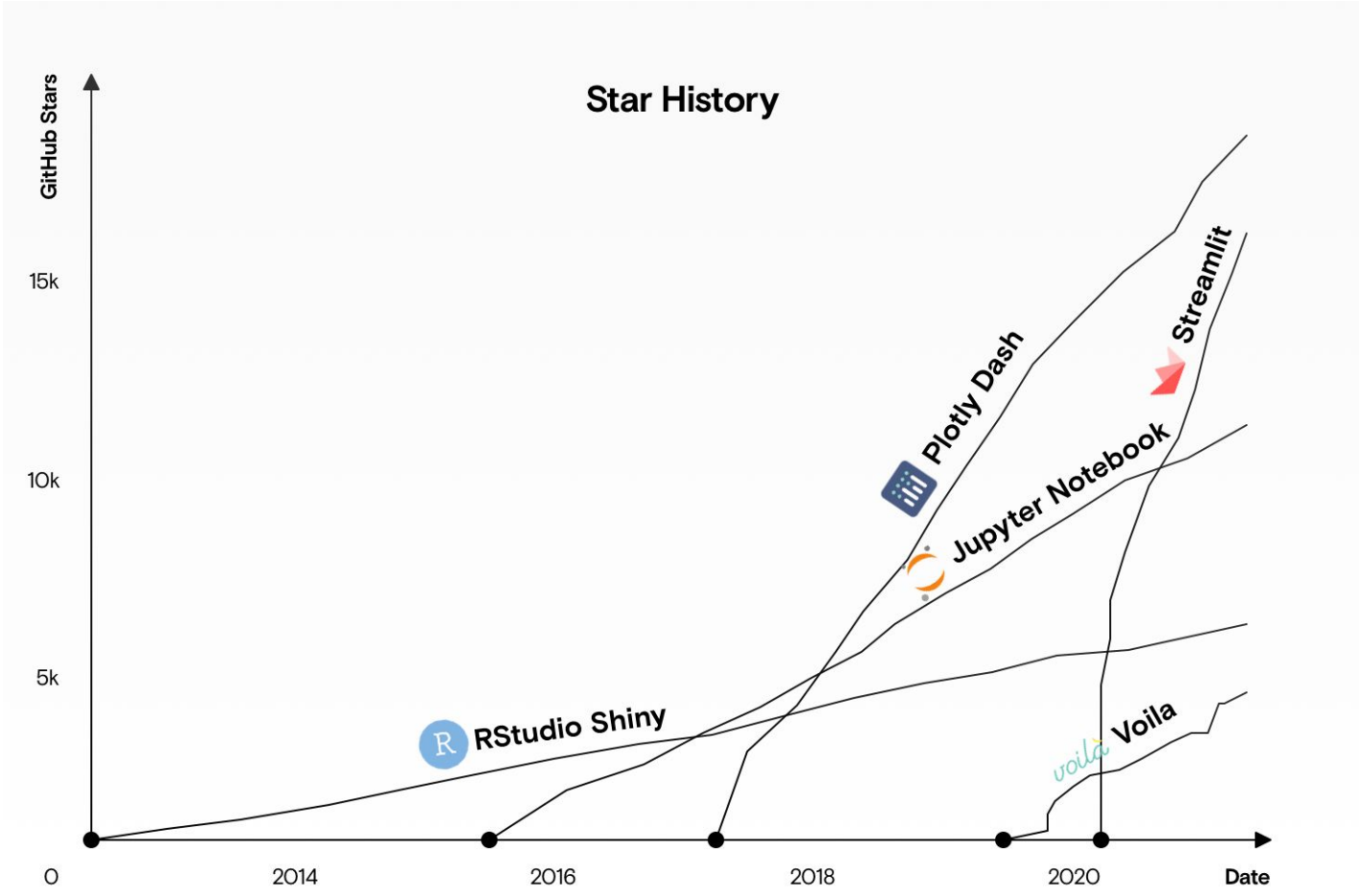
Get started instantly



And then check out our documentation and forum!

Other Tools

- **Streamlit** and **Dash** are full dashboarding solutions, focused on Python-based data analytics and running on the **Tornado** and **Flask** web frameworks, respectively.
- **Shiny** is a full dashboarding solution focused on data analytics with R.
- **Jupyter** is a notebook that data scientists use to analyze and manipulate data. You can also use it to visualize data.
- **Voila** is a library that turns individual Jupyter notebooks into interactive web pages.
- **Flask** is a Python web framework for building websites and apps — not necessarily with a data science focus.


Star History
GitHub Stars
15k
10k
5k
0
2014
2016
2018
2020
Date
RStudio Shiny
Plotly Dash
Jupyter Notebook
Streamlit
Voila

	Maturity	Popularity	Simplicity	Adaptability	Focus	Language support
Streamlit	C	A	A	C	Dashboard	Python
Dash	B	A	B	B	Dashboard	Python, R, Julia
Shiny	A	B	B	B	Dashboard	R
Voila	C	C	A	C	Dashboard	Python, R, Julia
Jupyter	A	A	B	B	Notebook	Python, R, Julia
Flask	A	A	B	A	Web framework	Python

- **Maturity:** Based on the age of the project and how stable it is.
- **Popularity:** Based on adoption and GitHub stars.
- **Simplicity:** Based on how easy it is to get started using the library.
- **Adaptability:** Based on how flexible and opinionated the library is.
- **Focus:** Based on what problem the library solves.
- **Language support:** The main languages the library supports.

Conclusion

Pros:

- Interactive
- Deployment is easy
- Active Community

Cons:

- Security issues
- Customization is limited