

# Build Web Apps in Python with Streamlit

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## Getting Started with Streamlit



**Dan Tofan**

Software Engineer, PhD

@dan\_tofan [www.programmingwithdan.com](http://www.programmingwithdan.com)

# Course Overview



- Getting started with Streamlit
- Building very simple web applications
- Building more web applications
- Extending Streamlit web applications
- Deploying Streamlit web applications

# Challenges of Building Web Applications

**Different skillset**

- **HTML, CSS, JavaScript**

**Fast evolving JavaScript ecosystem**

**Another team**

- **Communication**
- **Availability**

# Options for Building Web Applications with Python

## Flask

- **Lightweight web framework**
- **Low out-of-the-box interactivity**

## Django

- **Mature web framework**
- **Low out-of-the-box interactivity**

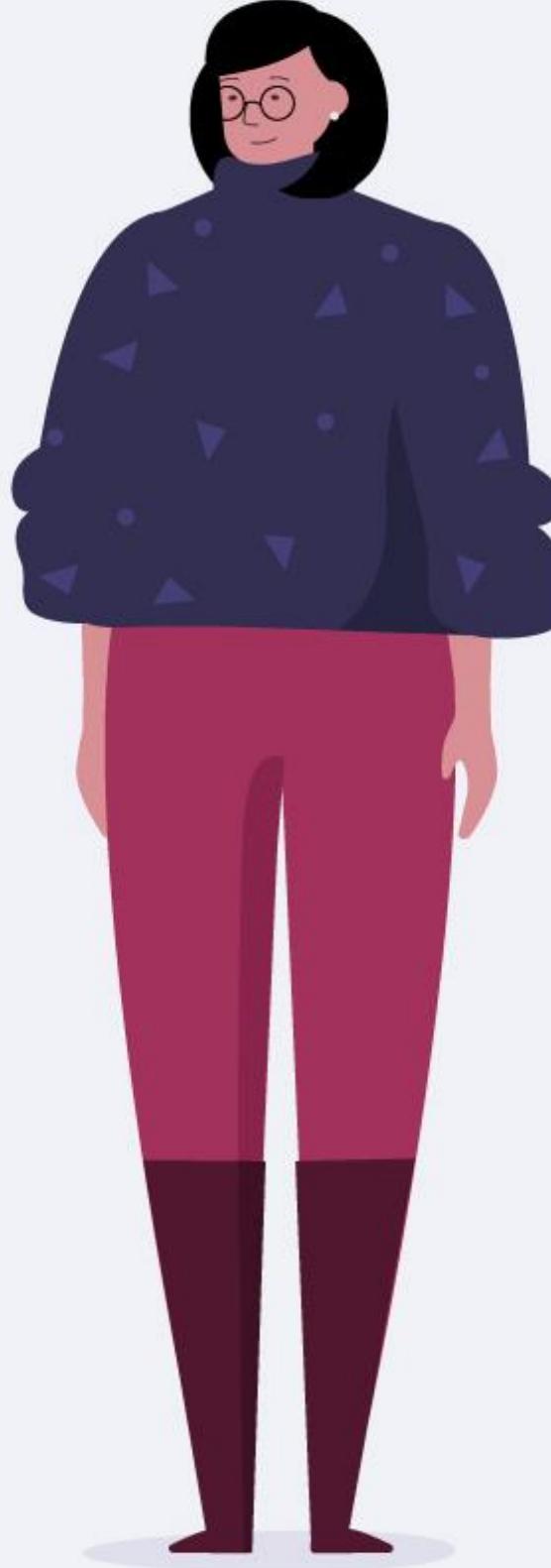
## Streamlit

- **Rapid prototyping**
- **Focused on interactive data apps**

# Module Overview



- Motivation
- Installation
- ‘Hello world’ with Streamlit
- Quick look at some examples



## Meet Sophia!

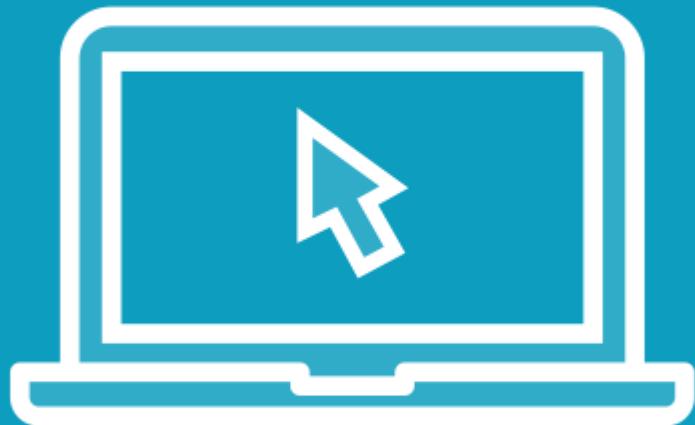
**Leader of the Data Science team at  
Globomantics**

### Upcoming demo

- Python project is ready
- Business users want a UI
- Insufficient front-end skills

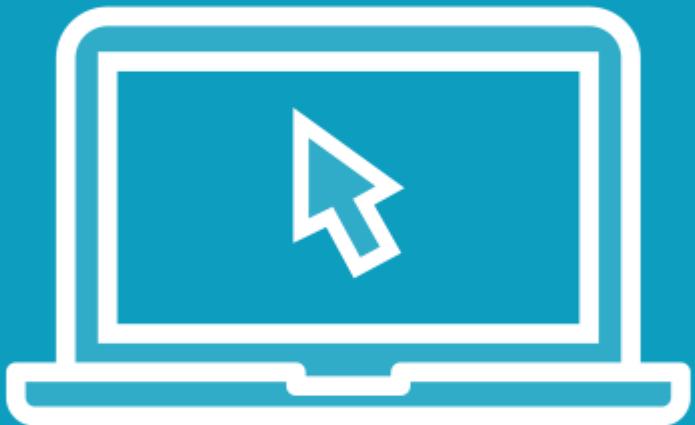
**How can Sophia add a web-based UI?**

# Demo



- **Install Streamlit**
  - Python 3.6 to 3.8
  - New virtual environment

# Demo



- ‘Hello world’ with Streamlit
  - Install PyCharm
  - Setup a new project
  - Create a web application

# Building Blocks of a Streamlit Web App

## Text

Title, headers,  
markdown

## Data

Visualization, some  
interactivity

## Charts

Line, area, bar

## Widgets

Checkboxes, buttons,  
text input

## Layout

Collapsible sidebar,  
columns

Up Next:  
Building Very Simple Web Applications

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