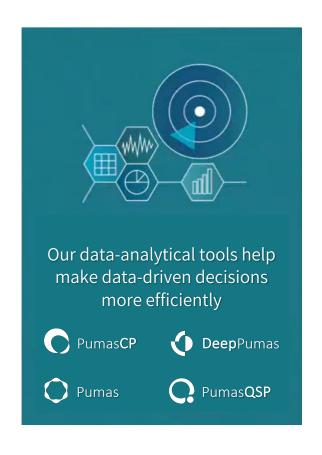
## Accelerating Access to Life-Saving Treatments to Patients

pumas

#### Augmenting healthcare intelligence with predictive analytics that turn data into life-saving decisions









## pumas<sup>Al</sup>

# PAGANZ 2024 Pumas Introduction

Mohamed Tarek

#### Instructor's background

- I am a senior product engineer at PumasAl Inc. (3 years)
- My background is in engineering (BSc and MSc) and computer science (PhD)
- Core strength in math and programming of statistical software:
  - Bayesian inference,
  - Optimal design of experiments, and
  - (Scientific) machine learning.
- Contact: mohamed@pumas.ai

### Rough timeline

Time	Activity
08:30	Registration and coffee
09:00	Setting up and introduction to Pumas cloud
09:30	Basic introduction to Julia
10:00	Morning tea
10:30	Pumas model building, data reading and estimation workflow
12:00	Lunch
13:00	Uncertainty quantification, simulation and dose selection
15:00	Afternoon tea
15:30	Joint time to event and tumor size model
17:00	Close

#### Announcements

- Pre-conference workshops at Population Approach Group in Europe (PAGE) in June 2024
  - Workshop 1: Scientific Modeling Augmented by Machine Learning with DeepPumas
  - Workshop 2: A Practical Bayesian Analysis Workflow in Pumas
- Pumas-Labs: <a href="https://pumas.ai/pumas-labs">https://pumas.ai/pumas-labs</a>
- Remote internship program: <a href="https://pumasai.com/careers/pumasai-remote-internship-program">https://pumasai.com/careers/pumasai-remote-internship-program</a>
- We are hiring: <a href="https://pumasai.com/careers">https://pumasai.com/careers</a>
- Sales contact: <a href="mailto:sales@pumas.ai">sales@pumas.ai</a>
- Consulting contact: <a href="mailto:consulting@pumas.ai">consulting@pumas.ai</a>

### JuliaHub setup

- Create an account on juliahub.com
- Go to the following URL to get credit added to your account
  - https://shorturl.at/uRU03
- Launch a custom instance (8 vCPUs and 32 GB of memory)

#### Download the workshop material

- Download <a href="https://github.com/PumasAI-">https://github.com/PumasAI-</a>
  Labs/PAGANZ 2024 NLME Workshop as a zip file
- Upload the zip file to JuliaHub by dragging and dropping
- Go to the terminal and type `unzip
  - PAGANZ\_2024\_NLME\_Workshop.zip`