

The logo for NobleProg, featuring the company name in a blue, sans-serif font.

The World's Local Training Provider

course completion

# CERTIFICATE

has been presented to / é concedido à

**Plamen Ivanov**

for the completion of / por finalizar o curso de

**Bespoke Python and Spark for Big Data**

Trainer  
Gunnar Bless

Duration  
**3 Days**

date of issue:  
**2022-08-08**

e-certificate:  
<https://cert.nobleprog.com/authenticate>  
Certificate ID: 685435  
Authentication Code: 400f0