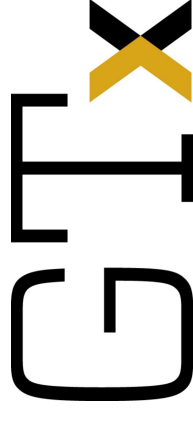


Professional Certificate



This is to certify that

Emily Bryans

successfully completed all courses and received
passing grades for a Professional Certificate in

Introduction to Python Programming

a program offered by GTx, in collaboration with
edX.



PROFESSIONAL CERTIFICATE
Issued December 2021

VALID CERTIFICATE ID
4de11bc7813042cf8633ef976f05867c

A handwritten signature in black ink, appearing to read 'David Joyner'.

Dr. David Joyner
Senior Research Associate
The Georgia Institute of Technology

A handwritten signature in black ink, appearing to read 'Nelson Baker'.

Dr. Nelson Baker
Dean of Professional Education
Georgia Tech Professional Education

A handwritten signature in black ink, appearing to read 'Zvi Galil'.

Dr. Zvi Galil
Former John P. Imlay Dean of Computing
Georgia Tech College of Computing

A handwritten signature in black ink, appearing to read 'Charles Isbell'.

Dr. Charles Isbell
John P. Imlay Dean of Computing
Georgia Tech College of Computing