



INSTITUTE

September 6, 2021

CERTIFICATE

of proficiency in the
C++ programming language

Essam A. El-Sherif

is a C++ Certified Associate
Programmer - **CPA**

Exam Version: CPA-21-02

Scope

- Basic data types and flow control
- Functions and function overloading
- Data aggregates
- Fundamentals of the object-oriented approach
- Class hierarchy and inheritance
- User-defined operators and exceptions

Christopher Boguslawski
President, C++ Institute



This certificate can be verified at
verify.openedg.org

Code: **PmmQ.F2o4.LgbX**

