



INSTITUTE

February 24, 2022

# CERTIFICATE

of proficiency in the  
C++ programming language

**Essam A. El-Sherif**

is a C++ Certified Professional  
Programmer - **CPP**

Exam Version: CPP-22-02

## Scope

- Templates
- STL sequential containers
- STL associative containers
- Modifying STL algorithms
- Non-modifying STL algorithms
- Sorting STL operations
- STL merge operations
- STL utilities and functional library
- STL advanced I/O

*Christopher Boguslawski*  
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Christopher Boguslawski  
President, C++ Institute



This certificate can be verified at  
[verify.openedg.org](https://verify.openedg.org)  
Code: Eg6b.jwis.avtg

