

February 18, 2019



INSTITUTE

# CERTIFICATE

of proficiency in the  
C programming language

**Samuel Thomas**

is a C Certified Professional  
Programmer | **CLP**

Exam Version: CLP-12-01

## Scope

- trigraphs and digraphs, C language standards, compilers, new keywords and capabilities
- calling conventions, handling a variable number of parameters, `<stdarg.h>` and its facilities
- low level I/O, file handles, operating on a file's metadata, file control
- memory and string block operations, sorting and searching, internationalization I18N
- accessing the environment, managing processes, POSIX, C11 and MS Windows threads
- float and integer processing, numerical anomalies, ULP, exceptions, multi-precision libraries
- network sockets, BSD sockets vs WinSock, POSIX sockets, client-server communication, peer-to-peer communication, `const`, `restrict`, `volatile` keywords, the `goto` statement, long jumps, portability issues, undefined behaviors

*Boguslawski*

Christopher Boguslawski  
President, C++ Institute



This certificate can be verified at  
[certificate.cppinstitute.org](http://certificate.cppinstitute.org)  
Code: **GKxj.pdCC.EABV**

