

# peteroupc.github.io

Welcome to peteroupc.github.io. This page contains more information on several of my programming projects on GitHub. View [this site's repository](#) to see this site's source code.

## Articles

Open-source articles on programming subjects.

- [Pseudocode Conventions](#)
- [Random Number Generator Recommendations for Applications](#)
- [Randomization and Sampling Methods](#)
- [More Random Sampling Methods](#)
- [Code Generator for Discrete Distributions](#)
- [The Most Common Topics Involving Randomization](#)
- [Partially-Sampled Random Numbers for Accurate Sampling of the Beta, Exponential, and Other Continuous Distributions](#)
- [How to Sample Unbounded Monotone Density Functions](#)
- [Bernoulli Factory Algorithms](#)
- [Testing PRNGs for High-Quality Randomness](#)
- [Examples of High-Quality PRNGs](#)
- [Notes on Calculating Jump Parameters for Some PRNGs](#)
- [A Note on Hash Functions](#)
- [A Note on the Bays-Durham Shuffle](#)
- [File Name Support in Applications](#)
- [Color Topics for Programmers](#)
- [Supplemental Color Topics for Programmers](#)
- [Generating Verifiable Random Numbers](#)
- [Chi-Squared Test](#)

## HTML/JavaScript

- [html3dutil](#): A public domain JavaScript library for easing the development of HTML 3D applications.
- [html-gears](#): An HTML5 3D implementation of the public domain sample, gears.c
- [canvasback](#): Displays an HTML canvas-based background that draws boxes in about the same color as the background color
- [colorpicker](#): A color picker in JavaScript. Supports adapters for integrating other popular color pickers, and can use native color selection controls. In the public domain.
- [IdnaJS](#): A JavaScript implementation of IDNA 2008 and Unicode normalization
- [BigNumber](#): An arbitrary-precision arithmetic library for JavaScript

## C-sharp

- [Fuzzer](#): This is a program that generates slightly altered versions of data files, for testing algorithms that parse file formats.
- [colorvalidator](#): This is a library for parsing and generating HTML and CSS colors.
- [petero-csharp](#): Library containing utility methods and classes.
- [CBOR](#): A C# implementation of Concise Binary Object Representation (RFC 7049).
- [Enriched](#): C# program that converts text/enriched files to HTML
- [MailLib](#): A portable library in C# and Java for parsing Internet mail messages
- [Encoding](#): A portable library in C# and Java for character encodings
- [TurtleParser](#): A portable library in C# and Java for parsing the Turtle RDF format

- [Calculator](#): A calculator for .NET, intended to demonstrate two features of the [CBOR library](#): its arbitrary-precision arithmetic capabilities, and its data serialization possibilities.

## About

Written by [Peter O.](#)

If you like any of these projects, you should donate to Peter O. at:  
<http://peteroupc.github.io/>