

Recent Developments in Unicon
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Abstract

The Unicon programming language is the direct descendant of Icon and SNOBOL. SNOBOL was the ultimate string processing and pattern matching language of the 60's. In the 1980's, Icon generalized SNOBOL pattern semantics into generators and goal-directed evaluation, an elegant way to make conventional-looking syntax more expressive and more powerful. Unicon exists to preserve and promote all that, in modern large-scale I/O-intensive applications.

This talk will focus on a few bits of current and ongoing work in Unicon. The largest recent piece of work is a new Java- (and Groovy-) based implementation that achieves seamless interoperation of Unicon and Java values and invocations. The talk will ask what it would take to do the same for calling C and C++ code from Unicon's classic (C-based) implementation, which currently requires wrapper functions and extra syntax that programmers could do without.

Another "new" addition in Unicon Version 13 is the integration of "native" SNOBOL patterns and regular expressions, two formerly competing notations for which Icon (and Unicon) provided an alternative, a control structure called string scanning. Now they all live as one big happy family.

As time allows, the talk will conclude with future directions: how should programming languages be evolving to account for how computing has changed, and is changing, in recent years?