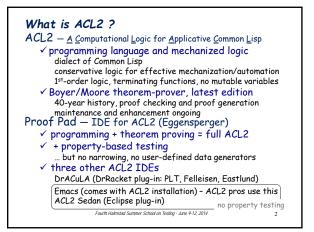
Fourth Halmstead Summer School on Testing June 2014

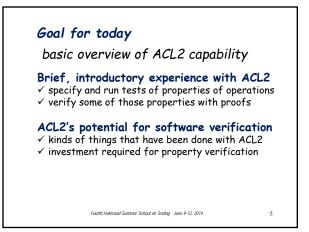
Fourth Halmstad Summer School on Testing June 9-12, 2014

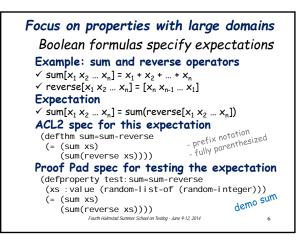
Testing and Verification in ACL2

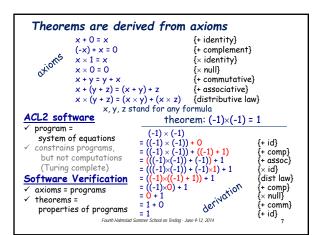
Rex Page, University of Oklahoma June 12, 9:30 - 10:30

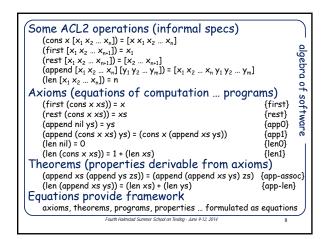


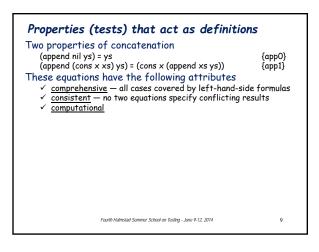


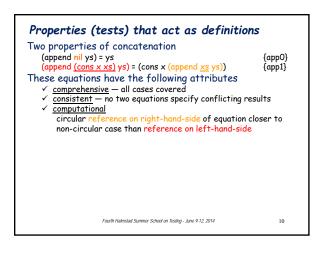


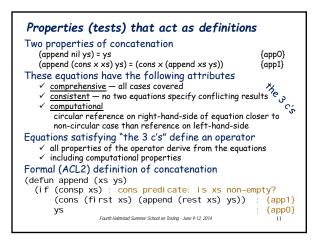


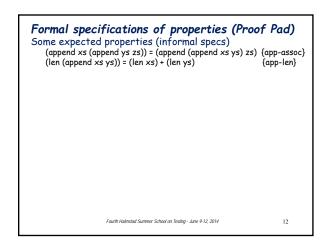








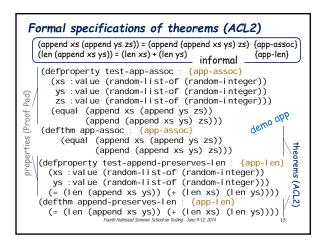


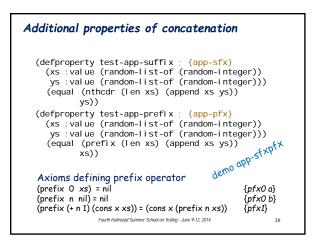


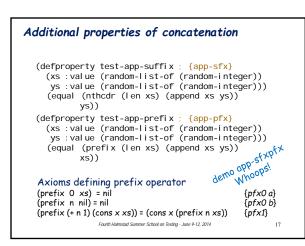
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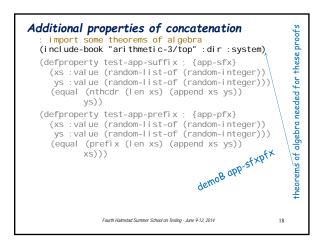
Formal specifications of properties (Proof Pad) (append xs (append ys zs)) = (append (append xs ys) zs) {app-assoc} (len (append xs ys)) = (len xs) + (len ys) informal {app-len}
<pre>(defproperty test-app-assoc ; {app-assoc}; (xs : value (random-list-of (random-integer)) ys : value (random-list-of (random-integer)) zs : value (random-list-of (random-integer))) (equal (append xs (append ys zs)) (append (append xs ys) zs)))</pre>
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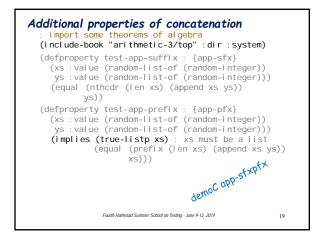
Formal specifications of properties (Proof Pad)
(append xs (append ys zs)) = (append (append xs ys) zs) {app-assoc} (len (append xs ys)) = (len xs) + (len ys) informal{app-len}
<pre>(defproperty test-app-assoc; {app-assoc} (xs :val ue (random-list-of (random-integer)) ys :val ue (random-list-of (random-integer)) zs :val ue (random-list-of (random-integer))) (equal (append xs (append ys zs)) (append (append xs ys) zs))) (defproperty test-append-preserves-len; {app-len} (xs :val ue (random-list-of (random-integer)) ys :val ue (random-list-of (random-integer)))</pre>
(defproperty test-append-preserves-len ; {app-len} (xs :value (random-list-of (random-integer)) ys :value (random-list-of (random-integer))) (= (len (append xs ys)) (+ (len xs) (len ys))))
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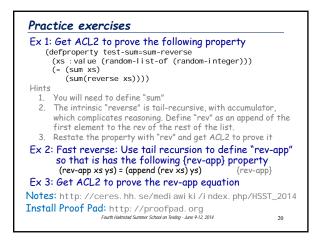


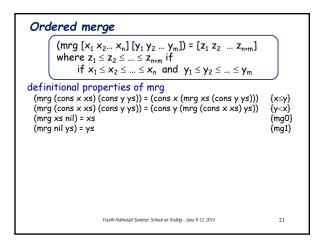


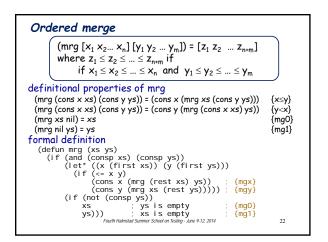


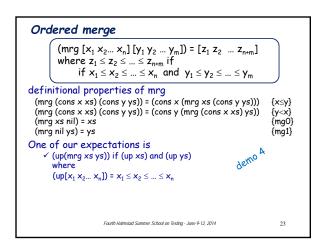


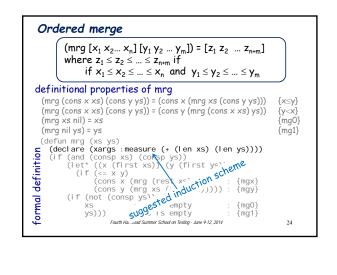












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