



EEL5840: Elements of Machine Intelligence

Subjugator 2006

Announcements



- Today's handouts on www:
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- Web Site
 - > Today's handouts
 - > www.mil.ufl.edu/eel5840
 - > Software and Notes
 - > XLISP Documentation



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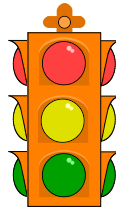
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Today's Menu

- LISP
 - > More on User-Defined Functions
 - DEFUN
 - COND
 - FUNCTION-LAMBDA-EXPRESSION
 - > LISP Chapter 5 Procedure Abstraction & Recursion



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from LISP Lab 1

Predicate Functions:

<i>(atom sex)</i>	t if sex is an atom
<i>(null sex)</i>	t if sex is nil or ()
<i>(eq sex1 sex2)</i>	t if sex1==sex2 (identical)
<i>(equal sex1 sex2)</i>	t if sex1=sex2
<i>(zerop sex1)</i>	t if sex=0
<i>(numberp sex)</i>	t if sex is a number
<i>(symbolp sex)</i>	t if sex is a symbolic atom
<i>(listp sex)</i>	t if sex is a list
<i>(member sex lis)</i>	nil if sex is not a member of lis

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LISP Lab 2

Predicate Functions:

<i>(integerp sex)</i>	t if sex is an integer
<i>(floatp sex)</i>	t if sex is a floating point number
<i>(and sex1 sex2)</i>	t if sex1 and sex2 are both true
<i>(or sex1 sex2)</i>	t if sex1 or sex2 or both are true
<i>(not pred)</i>	nil if pred=t or non-nil, t if pred=nil

User-Defined Functions:

(cond <(clause,) >...<(clause,)>) returns the evaluated action from the 1st non-nil predicate or nil where (clause,)=> (predicate-form action-form)

(defun fname (argument-list) <(forms)>)


(pprint (function-lambda-expression #'fname))

Recursive Function Definitions

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*See Class 4 Notes &
LISP Tutorial 1*

The End!

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