Symbols Relevant to Machine Learning

Symbol	Unicode	Name
×	00D7	Multiplication sign
÷	00F7	Division sign
±	00B1	Plus-minus sign
∓	2213	Minus or plus sign
½	00BD	Vulgar fraction one half
′	2032	Prime
″	2033	Double prime
‴	2034	Triple prime
ℂ	2102	Double struck capital C
ℍ	210D	Double struck capital H
ℕ	2115	Double struck capital N
ℙ	2119	Double struck capital P
ℚ	211A	Double struck capital Q
ℝ	211D	Double struck capital R
ℤ	2124	Double struck capital Z
∀	2200	For all
∁	2201	Complement
∂	2202	Partial differential
∃	2203	There exists
∄	2204	There does not exist
∅	2205	Empty set
∆	2206	Increment
∇	2207	Nabla
∈	2208	Element of
∉	2209	Not an element of
∊	220A	Small element of
∋	220B	Contains as a member
∌	220C	Does not contain as a member
∍	220D	Small contains as member
∎	220E	End of proof
∏	220F	N-ary product
∐	2210	N-ary coproduct
∑	2211	N-ary summation
∓	2213	Minus or plus sign
√	221A	Square root

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Symbol	Unicode	Name
$\sqrt[3]{}$	221B	Cube root
$\sqrt[4]{}$	221C	Fourth root
∝	221D	Proportional to
∞	221E	Infinity
|	2223	Divides
∤	2224	Does not divide
¬	00AC	Not sign
∧	2227	Logical and
∨	2228	Logical or
∩	2229	Intersection
∪	222A	Union
⋀	22C0	N-ary logical and
⋁	22C1	N-ary logical or
⋂	22C2	N-ary intersection
⋃	22C3	N-ary union
⋅	22C5	Dot operator
∫	222B	Integral
∬	222C	Double integral
∭	222D	Triple integral
∴	2234	Therefore
∵	2235	Because
:	2236	Ratio
∷	2237	Proportion
≃	2243	Asymptotically equal to
≄	2244	Not asymptotically equal to
≅	2245	Approximately equal to
≆	2246	Approximately but not actually equal to
≇	2247	Neither approximately nor actually equal to
≈	2248	Almost equal to
≉	2249	Not almost equal to
≊	224A	Almost equal or equal to
≋	224B	Triple tilde
≌	224C	All equal to
≍	224D	Equivalent to
≔	2254	Colon equals
=:	2255	Equals Colon
$\overset{\text{def}}{=}$	225D	Equal to by definition
≠	2260	Not equal to
≡	2261	Identical to

Symbol	Unicode	Name
≢	2262	Not identical to
≣	2263	Strictly equivalent to
≤	2264	Less than or equal to
≥	2265	Greater than or equal to
≪	226A	Much less than
≫	226B	Much greater than
⊂	2282	Subset of
⊃	2283	Superset of
⊄	2284	Not a subset of
⊅	2285	Not a superset of
⊆	2286	Subset of or equal to
⊇	2287	Superset of or equal to
⊈	2288	Neither a subset of nor equal to
⊉	2289	Neither a superset of nor equal to
⊊	228A	Subset of with not equal to
⊋	228B	Superset of with not equal to
⊕	2295	Circled plus
⊗	2297	Circled times
⋮	22EE	Vertical ellipsis
⋯	22EF	Midline horizontal ellipsis
⋰	22F0	Up right diagonal ellipsis
⋱	22F1	Down right diagonal ellipsis
⌈	2308	Left ceiling
⌉	2309	Right ceiling
⌊	230A	Left floor
⌋	230B	Right floor
⟨	27E8	Mathematical left angle bracket
⟩	27E9	Mathematical right angle bracket
Α	0391	Greek uppercase Alpha
Β	0392	Greek uppercase Beta
Γ	0393	Greek uppercase Gamma
Δ	0394	Greek uppercase Delta
Ε	0395	Greek uppercase Epsilon
Ζ	0396	Greek uppercase Zeta
Η	0397	Greek uppercase Eta
Θ	0398	Greek uppercase Theta
Ι	0399	Greek uppercase Iota
Κ	039A	Greek uppercase Kappa
Λ	039B	Greek uppercase Lambda

Symbol	Unicode	Name
Μ	039C	Greek uppercase Mu
Ν	039D	Greek uppercase Nu
Ξ	039E	Greek uppercase Xi
Ο	039F	Greek uppercase Omicron
Π	03A0	Greek uppercase Pi
Ρ	03A1	Greek uppercase Rho
Σ	03A3	Greek uppercase Sigma
Τ	03A4	Greek uppercase Tau
Υ	03A5	Greek uppercase Upsilon
Φ	03A6	Greek uppercase Phi
Χ	03A7	Greek uppercase Chi
Ψ	03A8	Greek uppercase Psi
Ω	03A9	Greek uppercase Omega
α	03B1	Greek lowercase alpha
β	03B2	Greek lowercase beta
γ	03B3	Greek lowercase gamma
δ	03B4	Greek lowercase delta
ε	03B5	Greek lowercase epsilon
ζ	03B6	Greek lowercase zeta
η	03B7	Greek lowercase eta
θ	03B8	Greek lowercase theta
ι	03B9	Greek lowercase iota
κ	03BA	Greek lowercase kappa
λ	03BB	Greek lowercase lambda
μ	03BC	Greek lowercase mu
ν	03BD	Greek lowercase nu
ξ	03BE	Greek lowercase xi
ο	03BF	Greek lowercase omicron
π	03C0	Greek lowercase pi
ρ	03C1	Greek lowercase rho
σ	03C3	Greek lowercase sigma
τ	03C4	Greek lowercase tau
υ	03C5	Greek lowercase upsilon
φ	03C6	Greek lowercase phi
χ	03C7	Greek lowercase chi
ψ	03C8	Greek lowercase psi
ω	03C9	Greek lowercase omega