
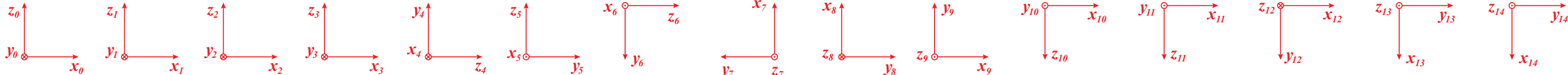
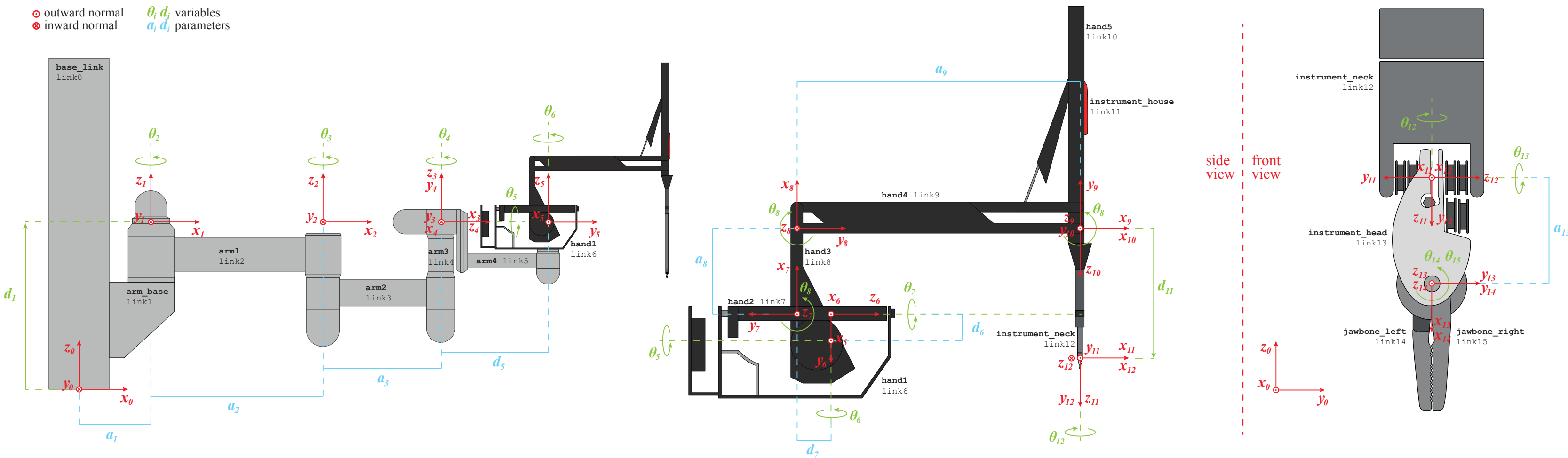
 outward normal
 inward normal

θ_i d_i variables
 a_i d_i parameters



z0 aligned with link1 actuation
Ψ0 fixed in link0

z1 aligned with link2 actuation
Ψ1 fixed in link1

z2 aligned with link3 actuation
Ψ2 fixed in link2

z3 aligned with link4 actuation
Ψ3 fixed in link3

z4 aligned with link5 actuation
Ψ4 fixed in link4

z5 aligned with link6 actuation
Ψ5 fixed in link5

z6 aligned with link7 actuation
Ψ6 fixed in link6

z7 aligned with link8 actuation
Ψ7 fixed in link7

z8 aligned with link9 actuation
Ψ8 fixed in link8

z9 aligned with link10 actuation
Ψ9 fixed in link9

z10 aligned with link11 actuation
Ψ10 fixed in link10

z11 aligned with link12 actuation
Ψ11 fixed in link11

z12 aligned with link13 actuation
Ψ12 fixed in link12

z13 aligned with link14 actuation
Ψ13 fixed in link13

z14 aligned with link15 actuation
Ψ14 fixed in link14

T01
θ = 0 (about z0, from x0 to x1)
d = d1* (along z0, from o0 to x1)
a = a1 (along x1, from z0 to z1)
α = 0 (about x1, from z0 to z1)

T23
θ = θ3* (about z2, from x2 to x3)
d = 0 (along z2, from o2 to x3)
a = a3 (along x3, from z2 to z3)
α = 0 (about x3, from z2 to z3)

T45
θ = θ5* (about z4, from x4 to x5)
d = d5 (along z4, from o4 to x5)
a = 0 (along x5, from z4 to z5)
α = 90° (about x5, from z4 to z5)

T67
θ = θ7* (about z6, from x6 to x7)
d = d7 (along z6, from o6 to x7)
a = 0 (along x7, from z6 to z7)
α = -90° (about x7, from z6 to z7)

T89
θ = θ8* (about z8, from x8 to x9)
d = 0 (along z8, from o8 to x9)
a = a9 (along x9, from z8 to z9)
α = 180° (about x9, from z8 to z9)

T1011
θ = 0 (about z10, from x10 to x11)
d = d11* (along z10, from o10 to x11)
a = 0 (along x11, from z10 to z11)
α = 0 (about x11, from z10 to z11)

T1213
θ = θ13* (about z12, from x12 to x13)
d = 0 (along z12, from o12 to x13)
a = a13 (along x13, from z12 to z13)
α = 90° (about x13, from z12 to z13)

T1415 ???
θ = θ15* (about z14, from x14 to x15)
d = 0 (along z14, from o14 to x15)
a = 0 (along x15, from z14 to z15)
α = 0 (about x15, from z14 to z15)

T12
θ = θ2* (about z1, from x1 to x2)
d = 0 (along z1, from o1 to x2)
a = a2 (along x2, from z1 to z2)
α = 0 (about x2, from z1 to z2)

T34
θ = θ4* (about z3, from x3 to x4)
d = 0 (along z3, from o3 to x4)
a = 0 (along x4, from z3 to z4)
α = 90° (about x4, from z3 to z4)

T56
θ = θ6* (about z5, from x5 to x6)
d = d6 (along z5, from o5 to x6)
a = 0 (along x6, from z5 to z6)
α = -90° (about x6, from z5 to z6)

T78
θ = θ8* (about z7, from x7 to x8)
d = 0 (along z7, from o7 to x8)
a = a8 (along x8, from z7 to z8)
α = 180° (about x8, from z7 to z8)

T910
θ = θ8* (about z9, from x9 to x10)
d = 0 (along z9, from o9 to x10)
a = 0 (along x10, from z9 to z10)
α = 90° (about x10, from z9 to z10)

T1112
θ = θ12* (about z11, from x11 to x12)
d = 0 (along z11, from o11 to x12)
a = 0 (along x12, from z11 to z12)
α = 90° (about x12, from z11 to z12)

T1314
θ = θ14* (about z13, from x13 to x14)
d = 0 (along z13, from o13 to x14)
a = 0 (along x14, from z13 to z14)
α = 0 (about x14, from z13 to z14)