

## Robotics and Automation Lab 6

**JMHA Jayasinghe 160238R**

Joint Angle	Start Configuration	End Configuration	Polynomial Function
Joint 1	0.0	-0.2	$-4.0767645601022206e-07 t^5 + 5.095955700127776e-06 t^4 - 1.6986519000425915e-05 t^3 + 0.0 t^2 + 0.0 t + 0.00021233148750532393$
Joint 2	0.0	0.0	$-3.299711921556537e-08 t^5 + 4.124639901945671e-07 t^4 - 1.3748799673152235e-06 t^3 + 0.0 t^2 + 0.0 t + 1.7185999591440293e-05$
Joint 3	0.0	0.0	$-1.3970901704851715e-09 t^5 + 1.7463627131064644e-08 t^4 - 5.821209043688214e-08 t^3 + 0.0 t^2 + 0.0 t + 7.276511304610267e-07$
Joint 4	0.0	0.0	$-1.8468423871809142e-09 t^5 + 2.3085529839761425e-08 t^4 - 7.695176613253808e-08 t^3 + 0.0 t^2 + 0.0 t + 9.618970766567259e-07$

Joint Angle	Start Configuration	End Configuration	Polynomial Function
Joint 1	0.0	-0.2	$-0.00038359147682832977 t^5 + 0.004794893460354122 t^4 - 0.0159829782011804 t^3 + 0.0 t^2 + 0.0 t - 0.00021277248524498305$
Joint 2	0.0	0.0	$-0.00021277248524498305 - 3.299773078992985e-08 t^5 + 4.1247163487412316e-07 t^4 - 1.3749054495804104e-06 t^3 +$

			$0.0 t^2 +$ $0.0 t +$ $1.718631811975513e-05$
Joint 3	0.0	0.0	$-1.3972052630606416e-09 t^5 +$ $1.7465065788258018e-08 t^4 +$ $-5.821688596086006e-08 t^3 +$ $0.0 t^2 +$ $0.0 t +$ $7.277110745107507e-07$
Joint 4	0.0	0.0	$-1.8473350013437088e-09 t^5 +$ $2.309168751679636e-08 t^4 +$ $-7.697229172265452e-08 t^3 +$ $0.0 t^2 +$ $0.0 t +$ $9.621536465331815e-07$

Joint Angle	Start Configuration	End Configuration	Polynomial Function
Joint 1	0.0	-0.2	$-0.0003835917375459085 t^5 +$ $0.004794896719323856 t^4 +$ $-0.01598298906441285 t^3 +$ $0.0 t^2 +$ $0.0 t +$ $-0.0002126366948393965$
Joint 2	0.0	0.0	$0.0007679392157171038 t^5 +$ $-0.009599240196463797 t^4 +$ $0.031997467321545986 t^3 +$ $0.0 t^2 +$ $0.0 t +$ $3.165848067521182e-05$
Joint 3	0.0	0.0	$-1.849251700036803e-09 t^5 +$ $2.3115646250460035e-08 t^4 +$ $-7.705215416820011e-08 t^3 +$ $0.0 t^2 +$ $0.0 t +$ $9.631519271025013e-07$
Joint 4	0.0	0.0	$-1.7358778956122483e-09 t^5 +$ $2.1698473695153103e-08 t^4 +$ $-7.232824565051033e-08 t^3 +$ $0.0 t^2 +$ $0.0 t +$ $9.041030706313791e-07$

Joint Angle	Start Configuration	End Configuration	Polynomial Function
Joint 1	0.0	-0.2	$0.0003835910989393759 t^5 +$ $-0.004794888736742199 t^4 +$ $0.015982962455807326 t^3 +$ $0.0 t^2 +$ $0.0 t +$ $0.00021296930240843892$
Joint 2	0.0	0.0	$-0.00038404748930971356 t^5 +$ $0.00480059361637142 t^4 +$ $-0.016001978721238062 t^3 +$ $0.0 t^2 +$ $0.0 t +$ $2.4734015475758042e-05$
Joint 3	0.0	0.0	$-0.0007680012398839343 t^5 +$ $0.009600015498549178 t^4 +$ $-0.032000051661830585 t^3 +$ $0.0 t^2 +$ $0.0 t +$ $6.457728822795161e-07$
Joint 4	0.0	0.0	$-1.7071410780999945e-09 t^5 +$ $2.133926347624993e-08 t^4 +$ $-7.113087825416642e-08 t^3 +$ $0.0 t^2 +$ $0.0 t +$ $8.891359781770802e-07$