

```
function omega_r2 = r2axisangle(R)
    if norm(R - eye(3)) < 1e-3
        omega_r2 = [0;0;0];
    else
        theta_axis = acos(0.5 * (trace(R) - 1));
        omega_hat = 1/(2*sin(theta_axis)) * (R - R');
        omega_hat = [omega_hat(3,2);
                    omega_hat(1,3);
                    omega_hat(2,1)];
        omega_r2 = omega_hat * theta_axis;
    end
end
```