

Book Errata

August 10, 2007

1. page 4, line 18 : $\dot{r}(t) \longrightarrow r(t)$
2. page 47, line 17 : apart for \longrightarrow apart from
3. page 148, line 1 : RPR/RPP \longrightarrow RPP/RPP
4. page 236, line 18 : monster \longrightarrow monstar
5. page 388, Reference no. 148 : 30(12):923-930 \longrightarrow 30(2):131-138
6. page 397, Reference no. 339 : Knot-removal surface fairing using search strategies \longrightarrow Designing faired parametric surfaces
7. Page 22 Fig. 1.10: at $t = t_4$, " $N_{1,4}$ is C^2 " should be eliminated.
8. page 23 (1.65)

$$\dot{\mathbf{r}}(t) = \sum_{i=1}^n (k-1) \left(\frac{\mathbf{P}_i - \mathbf{P}_{i-1}}{t_{i+k-1} - t_i} \right) N_{i,k-1}(t),$$

should be

$$\dot{\mathbf{r}}(t) = \sum_{i=0}^{n-1} (k-1) \left(\frac{\mathbf{P}_{i+1} - \mathbf{P}_i}{t_{i+k} - t_{i+1}} \right) N_{i,k-1}(t).$$

9. Page 35 Eqn (2.1):

$$\Delta s \simeq |\Delta \mathbf{r}| = |\mathbf{r}(t + \Delta t) - \mathbf{r}(t)| = \left| \frac{d\mathbf{r}}{dt} \Delta t + \frac{d^2\mathbf{r}}{dt^2} (\Delta t)^2 \right| \simeq \left| \frac{d\mathbf{r}}{dt} \right| \Delta t,$$

should be

$$\Delta s \simeq |\Delta \mathbf{r}| = |\mathbf{r}(t + \Delta t) - \mathbf{r}(t)| = \left| \frac{d\mathbf{r}}{dt} \Delta t + \frac{1}{2} \frac{d^2\mathbf{r}}{dt^2} (\Delta t)^2 \right| \simeq \left| \frac{d\mathbf{r}}{dt} \right| \Delta t,$$

10. Page 55 Equation just before Section 3.3

$$A = \int_0^{\frac{\pi}{2}} \int_0^1 \sqrt{1+r^2} r \, d\theta \, dr = \frac{\pi}{6}(\sqrt{8}-1).$$

should be

$$A = \int_0^{\frac{\pi}{2}} \int_0^1 \sqrt{1+r^2} r \, dr \, d\theta = \frac{\pi}{6}(\sqrt{8}-1).$$