

ERRATA

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“Realistic Image Synthesis using Photon Mapping”

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(lfb=line from bottom; lft=line from top)

- Page vi, 14th lft. “mathematicians” should be “mathematician”. (Thanks to Per Christensen)
- Page vi, 1st lfb. “repetoire” should be “repertoire”. (Thanks to Takeshi Naemura)
- Page 8, Figure 1.5, “Absorbtion” should be “Absorption”. (Thanks to Takeshi Naemura)
- Page 16, 6th lfb. remove extra “is”. (Thanks to Piero Foscari)
- Page 16, 5th lfb. exchange “longitude” and “latitude”. (Thanks to Takeshi Naemura)
- Page 17, Equation 2.14 should be: $E(x) = \frac{\Phi_s \cos \theta}{4\pi r^2}$ (Thanks to Koji Nakamaru)
- Page 17, 12th lfb. “denominator” should be “numerator” (Thanks to Koji Nakamaru)
- Page 20, Equation 2.20, could technically be ≤ 1 rather than < 1 . (Thanks to Piero Foscari)
- Page 23, Equation 2.28, ρ_{\perp} should be computed as: $\rho_{\perp} = \frac{\eta_1 \cos \theta_1 - \eta_2 \cos \theta_2}{\eta_1 \cos \theta_1 + \eta_2 \cos \theta_2}$ (Thanks to Steve Marschner)
- Page 26, 13th lfb. w should be computed as: $w = \vec{T} \cdot \frac{\vec{H} - (\vec{n} \cdot \vec{H})\vec{n}}{|\vec{H} - (\vec{n} \cdot \vec{H})\vec{n}|}$ (Thanks to Colin Withers)
- Page 26, Equation 2.35. First term should be: $Z(t) = \frac{\sigma}{(1 + \sigma t^2 - t^2)^2}$ (Thanks to Theo Engell-Nielsen)
- Page 27, Equation 2.41. First term should be: $t = \sqrt{\frac{\xi_1}{\sigma - \xi_1 \sigma + \xi_1}}$ (Thanks to Morten Lang)
- Page 28, Equation 2.45. $\vec{\omega}$ should be $\vec{\omega}'$. (Thanks to Manfred Ernst)
- Page 45, Equation 3.7. $i = 0$ should be $j = 0$. (Thanks to Takeshi Naemura)
- Page 51, 1st lft. “This” should be “The”. (Thanks to Piero Foscari)
- Page 57, Pseudocode in 5.3. The do-loop should be: (Thanks to Colin Withers)
- ```
do { use rejection sampling to find new photon direction
 x = 2ξ1 - 1 ξ1 ∈ [0, 1] is a random number
 y = 2ξ2 - 1 ξ2 ∈ [0, 1] is a random number
 z = 2ξ3 - 1 ξ3 ∈ [0, 1] is a random number
} while (x2 + y2 + z2 > 1)
```
- Page 58, 1<sup>st</sup> lfb. “with” should be “will”. (Thanks to Rasmus Tamstorf)
- Page 61, 10<sup>th</sup> lft. “includes” should be “include”. (Thanks to Piero Foscari)
- Page 63. “ $p_{s,avg}$ ” should be “ $\rho_{s,avg}$ ”, and “ $p_{d,avg}$ ” should be “ $\rho_{d,avg}$ ” (Thanks to Suzuki Masuo)
- Page 69, 6<sup>th</sup> lft. remove extra “makes”. (Thanks to Piero Foscari)
- Page 70, 9<sup>th</sup> lft. “acos(dx)” should be “acos(dz)”. (Thanks to Stephen Westin)
- Page 71, 7<sup>th</sup> lfb. Add space between “,” and “it”. (Thanks to Piero Foscari)
- Page 77, Equation 7.3. “ $d\vec{\omega}'_i$ ” should be “ $d\vec{\omega}$ ”. (Thanks to Piero Foscari)
- Page 79, 1<sup>st</sup> lfb. “to leak” should be “from leaking”. (Thanks to Piero Foscari)
- Page 82, Equation 7.11, add missing factor  $\frac{1}{\pi r^2}$ . (Thanks to Jon Frydensbjerg)
- Page 107, Caption for Figure 9.9. “Plate VI” should be “Plate VII”. (Thanks to Takeshi Naemura)
- Page 117, Equation 10.14.  $\frac{1}{2|g|}$  should be  $\frac{1}{2g}$ . (Thanks to Steven Worley)
- Page 120, Equation 10.19.  $L_d$  should be  $L_l$ . (Thanks to Takeshi Naemura)
- Page 124, Equation 10.27. Line 2 is the same as line 1 and can be ignored. (Thanks to Miloslaw Smyk)
- Page 140, 6<sup>th</sup> lfb. “ $\epsilon(x)$ ” should be “ $\epsilon_i(x)$ ”. (Thanks to Bent Larsen)
- Page 140, 4<sup>th</sup> lfb. Remove extra “is”. (Thanks to Takeshi Naemura)
- Page 141, Equation 11.4. “ $\epsilon(x)$ ” should be “ $\epsilon_i(x)$ ”. (Thanks to Bent Larsen)
- Page 141, 4<sup>th</sup> lft. “ $E_0$ ” should be “ $E_i$ ”. (Thanks to Bent Larsen)
- Page 142, Equation 11.8, denominator of last term should be  $\min(d_{j,i}, d_{j,i-1})$ . (Thanks to Wojciech Jarosz)
- Page 146, 20<sup>th</sup> lfb. “makes” should be “make”. (Thanks to Piero Foscari)
- Page 146, 3<sup>th</sup> lft. “Pietriek” should be “Pietrek”. (Thanks to Mr. Ohgi)
- Page 146, 3<sup>th</sup> lfb. “Pietrik” should be “Pietrek”. (Thanks to Mr. Ohgi)
- Page 148, 13<sup>th</sup> lft. “strafied” should be “stratified”. (Thanks to Miloslaw Smyk)
- Page 148, 15<sup>th</sup> lft. “that” should be “than”. (Thanks to Miloslaw Smyk)
- Page 150, 3<sup>rd</sup> lfb. “31.994” should be “31,994”. (Thanks to Takeshi Naemura)

Page 154, Equation A.6, remove extra parentheses. (Thanks to Piero Foscari)  
Page 155, 10<sup>th</sup> lft. “ $N$ ” should be “ $\Psi_N$ ”. (me)  
Page 155, Equation A.9. ‘ $P_{opt}$ ’ should be “ $P_{opt}(x)$ ”. (me)  
Page 168, Exchange “glass-cognac” and “glass-air”. (Thanks to Kevin Suffern)  
Page 146, Reference [21], “pages 137-45” should be “137-145”. (Thanks to Mr. Ohgi)  
Page 162, Source line 328, “ $<$ ” should be  $\leq$ . (Thanks to Inam Ur-Rahman Malik)  
Page 173, Reference 55: “Kryzsztof S. Klimansezewski” should be “Krzysztof S. Klimaszewski”  
(Thanks to Miloslaw Smyk)  
Page 174, Reference 74: “Sumant” should be “Sumanta”. (Thanks to Miloslaw Smyk)  
Caption, Color Plate I: “nooisy’ should be ”noisy”. (Thanks to Piero Foscari)  
Caption, Color Plate V: “casutic’ should be ”caustic”. (Thanks to Piero Foscari)