

Feel free to work with other students, but make sure you write up the homework and code on your own (no copying homework *or* code; no pair programming). Feel free to ask students or instructors for help debugging code or whatever else, though.

Note: You need to create a Github account for submission of the coding part of the homework. Please create a repository on Github to hold all your code and include your Github account username as part of the answer to the coding problems.

1 (Christoffel Symbol.) Compute the Christoffel symbols for a surface of revolution parametrized by

$$\mathbf{x}(u, v) = (f(v) \cos(u), f(v) \sin(u), g(v)), \quad f(v) \neq 0.$$

