Bill Paxton

Then: Computer Science at Stanford, SRI, PARC, Adobe Now (retired): Astro-computing with Lars Bildsten at KITP, UCSB

EZ to Evolve ZAMS Stars: A Program Derived from Eggleton's Stellar Evolution Code

Started from Eggleton's code as of fall of 2003
Replaced GOTO's by label-less control structures
Replaced IMPLICIT's by explicit declarations
Removed the code for binary stars
Converted to Fortran 90 without COMMON blocks
Changed to symbolic names for numeric constants
Restructured data declarations and added comments
Created a new control interface based on call-back procedures
Added procedures for save/restore of complete state
Tested by comparing with data from Eggleton's code
Replaced original matrix solver by off-the-shelf LAPACK routine
Reimplemented Eggleton's recipe for Helium flash recovery
Put lots of plots on my web site as downloadable pdf files

Wouldn't it be nice if students could evolve stars? Wouldn't it be nice if researchers could evolve stars? Maybe with EZ, even full professors could evolve stars!

EZ tar file with source, data, and instructions available on web Please get it, use it, break it, and suggest how to improve it http://theory.kitp.ucsb.edu/~paxton/