Sean M. McCurry

kambestad212@yahoo.com

Education Qualifications:

B.S. Physics and Astronomy duel degree, N. Arizona University May 2006

Public Schools of Boulder, Colorado (Fairview High School) June 2000

Teaching Experience:

Tutoring (Physics department) – 3 years

Teaching Assistant (Prof. David Cole, PHY 161 - General Physics 1) - 1 semester

Renaissance Adventures (private institution) – Summer 2001 through Summer 2005 – Focused on core sciences (physics, chemistry, biology), as well as personal emphasis in astronomy and general mathematics, all for ages 5-15. Team work, teambuilding, empowerment, inspiration, creativity, were emphasized here, to aid individuals in learning lessons to bring group harmony.

Programming Experience: (level of understanding included: (1) to (5) with 5 as highest)

MATLAB (3.5) - General mastery of language, from data manipulation and analysis to interactive simulation. 4 major programs written, one of which simulated motion of variable asteroids, yielded functional system.

IDL (2) - Moderate knowledge of language. Used during used during observing to manipulate and analyze data. Specifically, extracted stellar flux data from CCD images.

UNIX (1) - basic understanding of language, including creation and manipulation of files and data.

FORTRAN (3) - Used in congruence with MS Excel to create data and graphical analysis. Also assisted with Modflow – an Excel based hydrological simulation in the Colorado area.

Pascal (2) - General knowledge. 3 main programs written for financial, analytic, and data input purposes

C, Basic (2) - Wrote basic text based programs and games in both.

Photoshop (3) - Can create and edit photographs and images, including cleanup, lighting effects, and create custom images and designs for presentational and internet use.

Windows and Mac (4) - I have had experience with Windows based systems since Win3.1 and Mac systems since Mac 7

MS Office (3) - I have spent considerable time with MS Word (5) and MS Excel (4), as well as MS PowerPoint (3).

HTML (2) - Basic knowledge of language, including creation of web pages, links, graphics, and custom layouts.

Experience with equipment:

Telescope Equipment:

- assisted at an on-campus observatory for 1 year as part of the outreach program
- guided the telescope and was able to run the facility single-handed
- ran a 1-night observing session at the 31" telescope at Anderson Mesa, NURO, in which the focuses were CCD camera maintenance, computerized telescope control, including focusing and adjusting the lens, and exposure storage.

Lab Equipment: interferometers, spectroscopes, lasers, detectors, diodes, circuits, as well as the physical electronics associated with these devices.

Computer Equipment: Built PC computers, including installation of motherboard, powerbox, drives, and video card/Ethernet hardware. Programming, see programming below.

Electronic/Circuitry: Worked with basic circuit boards, diodes, various complex chips, as well as basic resistors and capacitors.