

Curriculum Vitae

Lilli D Christoph

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Education

M.S.

Carnegie Mellon University, Physics, May 2007 (Expected)

B.S.

University of Arizona, Physics and Astronomy, 2004

Research Experience

- Graduate Research Assistant, 2006, Carnegie Mellon University Department of Physics, Dr. Stephen Garoff
 - Particle Image Velocimetry. Micro-particles are dropped onto the meniscus formed at the fluid-substrate interface and their subsequent movement is recorded. The goal is to solve for the fluid dynamics near the interface based on the movements of the particles.
- Research Assistant in Astronomy, 2002-2004, University of Arizona Department of Astronomy, Dr. Dennis Zaritsky
 - Galaxy Modeling. Mastered complex programs with many operational variables to obtain reasonable results. Ran statistical tests, such as the Kolmogorov-Smirnov test, to justify findings. Research also required some C-programming and LaTeX.
- Research Assistant, 2001-2002, [University of Arizona Imaging Technology Laboratory](#)
 - Adapted Fourier Transform Infrared Spectrometer (FTIR) for measurements of Charge-Coupled Device (CCD) device thickness. Initiated the system, including cooperating optics, and developed a set of reliable measurement techniques.
 - Conducted destructive cryogenic tests for compatible CCD packaging materials. Exhibited results competitively at the 2001 University of Arizona Student Showcase.
 - Wrote a package of programs to direct a remote server-camera system. Learned Command Language (CL) and Subset Pre-Processor (SPP) programming languages specifically for this task. This was part of the initial work on the software package [AZCam](#).
 - Adapted PDA for metrological device analog input datalogging.
 - Experience in Quality Analysis of substrates.

Teaching Experience

- Physics II for Science Students (Teaching Assistant), CMU, 2006-2007
- Introduction to Astronomy (Teaching Assistant), CMU, Fall 2005

Awards and Honors

- Consortium for Undergraduate Research and Education in Astronomy (CUREA), full tuition scholarship, 2003 (see [image](#))
- University of Arizona President's Award for Excellence Scholarship, 1999-2001
- University of Arizona Tradition of Excellence Scholarship, 1999-2000