# Patricia Quarles

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1415 George Ave. Apt 202          Norman, Ok 73072          (903) 819-9195

**OBJECTIVE**          To obtain a Masters degree in Environmental Science.

**EDUCATION**

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| 2004-2003 | **University of Oklahoma** | Norman, OK |

- M.S., Environmental Science (Currently pursuing)

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| 1998-2002 | **University of Texas at Dallas** | Richardson, TX |

- B.S., Physics

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| 1997-1998 | **Grayson County College** | Denison, TX |

- High School Enrichment

**EMPLOYMENT**

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| 2003 | **University of Oklahoma** | Norman, OK |

- Working as a research and teaching assistant in the Dept. of Civil Eng. And Environmental Science.

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| 2002 (Fall Semester) | **University of Oklahoma** | Norman, OK |

- Worked as a physics teaching assistant in the Dept. of Physics and Astronomy.

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|---|---|---|
| 2002 (Spring Semester) | **University of Texas at Dallas** | Richardson, TX |

- Worked as a physics teaching assistant in the Dept. of Physics.

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| 2001-2002 | **Texas Christian University** | Ft. Worth, TX |

- Research. See projects.

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| 1999-2002 | **Learning Resource Center** | Richardson, TX |

- Worked as math and physics tutor at the university level in an open lab environment.
- Involved in Supplemental Instruction (SI). This program targets typically hard classes to provide a 'sit in tutor' to give students additional help.

**Computer Skills**

Computer Languages & Software

- C,C++
- Iraf (Software used mainly by astronomers for imaging)
- IDL (Software used mainly for imaging)
- PHP
- MySQL
- MS-Office→Excel, Word, PowerPoint, etc.

Operating Systems

- Sun Solaris (UNIX)
- Windows
- Macintosh

**Relevant Courses**

Completed

- Ground-Water Quality Protection
- Mechanics, Electricity and Magnetism, Optics, Modern Physics, Space Science, Astronomy, Mathematical Methods of Physics, Quantum Mechanics, Physical Measurements Lab, Electronics, Contemporary Physics, Technical Writing, Special and General Relativity (Grad), Thermodynamics and Statistical Mechanics
- Calculus I & II, Multivariable Calculus, Theoretical Concept of Calculus, Linear Algebra, Differential Equations, Complex Variables, Introduction to Probability and Statistics.

**Projects**      Image Processing

ADCIRC Database
- Currently, building a database of ADCIRC grids available through the internet for the ADCIRC community.

Image Processing
- Galaxy Images in three different filters of NGC 628 were processed using two software packages, Iraf and IDL.  Used the hydrogen alpha image to investigate how much new star growth is in the nucleus and arms of this spiral galaxy.

Hypervelocity Impacts
- Participated in NSF REU summer research opportunity.  Spent a summer at Baylor University working on a project related to hypervelocity impacts.  Specifically, I was to adapt an electrostatic particle accelerator attachment from an old Van de Graff to an accelerator tube to simulate hypervelocity impacts.

**Professional Memberships, Honors, Awards, & Other Activities**
- Society of Physics Students Member
  - Communications Officer (5/00-5/01)
  - President (5/01-5/02)
- Golden Key National Honor Society Member
- ΣΠΣ Member (Physics Honor Society)
- Recipient of Texas Space Grant Consortium Scholarship (8/00-5/01)
- Recipient of Police and Fire Fighters' Association Scholarship (8/98-5/02)
- Participation in Department's Physics Circus
- Attended 2001 CEDAR Conference
- Attended 2001Texas Sections of the APS and AAPT