

# Carl L. Lundstedt

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## Overview

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A recent graduate from the University of Nebraska comfortable with a demanding work environment. Accustomed to deadlines and working with limited supervision. Highly skilled in both data analysis and computer administration/programming.

## Education

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2001 Ph.D., University of Nebraska-Lincoln, Department of Physics and Astronomy.  
1995 M.S., University of Nebraska-Lincoln, Department of Physics and Astronomy  
1993 B.S., University of Dallas Department of Physics

## Work Experience

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1993-Present Graduate Research Assistant. A member of the DZERO collaboration at Fermi National Accelerator Laboratory. Worked both onsite and remotely at the University of Nebraska-Lincoln. Manipulated complex data files of varying formats across diverse computer systems to facilitate an analysis of DZERO data. Communicated with onsite experts to report findings and techniques. Maintained software crucial to other researcher's projects.

Teaching Assistant at the University of Nebraska-Lincoln. Instructed undergraduate students in general and modern physics courses and laboratory sessions. Responsible for preparing lectures and assignments, tutoring, grading, assigning and recording student grades, and administering and supervising exams.

Responsible for the computing resources of the high energy physics research group and frequently assisted departmental computational staff in upgrades and security issues.

1997 Onsite computer service technician at Technological Service Solutions (TSS) in Lincoln, NE. Serviced personal computer hardware for customers of Gateway, Sears and other PC vendors. Tasks included troubleshooting, customer instruction, hardware replacement, OS installation and recovery.

1991-1993 Research Assistant in low energy nuclear scattering experiments at the University of Kentucky Van De Graaf accelerator facility under the supervision of Dr. Sally Hicks, University of Dallas.

1989-1993 Undergraduate Teaching Assistant, University of Dallas. Instructed undergraduate students in physics and astronomy course work and assisted in laboratory setup and instruction.

## Special Skills

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Excellent oral and written skills; comfortable speaking in front of large groups. An accomplished instructor able to convey difficult concepts.

Skilled at abstract thinking and data analysis using a variety of data analysis tools.

Highly skilled in many different areas of mathematics including statistics, calculus and differential equations.

Excellent problem solver and abstract thinker.

## Computer Skills

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System administration experience in DEC VMS, DEC UNIX (TRU64), Windows NT/2000/95/98 and Linux, all in a dynamic and demanding research environment.

### **Computer Skills (continued)**

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Provided Linux expertise for the University of Nebraska-Lincoln Physics and Astronomy Department.

Assisted in identifying and halting security intrusions on Linux workstations for the University of Nebraska Physics Department.

Experienced with Linux usage and configuration on both PC and Macintosh hardware. Worked with a variety of Linux distributions including RedHat, Mandrake, Vector, Peanut, FREESCO, LOAF, SME Server, Storm, Debian and Yellowdog.

Proficient in programming in C, Fortran, HTML, PERL, Maple and a variety of UNIX shells.

Constructed PERL and C-shell scripts to automate data retrieval and processing.

Experienced in all major office software suites including MS Office and Staroffice, with extensive experience with Power Point, Excel, Starimpress and Starcalc. Adept at image editing with GIMP. Written large documents using LyX and LaTeX.

Successfully ported in-house Fortran Code from VAX to DEC UNIX, and analysis code from VMS to UNIX.

Implemented Kerberos authorization under Linux and DEC UNIX.

Experienced in creating large computer system backups. Responsible for backups at DZERO and the University of Nebraska.

Configured and maintained internet services including APACHE web servers, several OS specific ftp servers, telnet, ssh and VNC servers.

Familiar with TCP/IP protocols and firewall construction using ipchains and ipmasquerade. Utilized 2.2 and 2.4 Linux kernels as internet firewalls.

Experienced with installing PC hardware that is utilized by either a Windows OS or Linux OS.

### **Awards and Professional Organizations**

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Husker Linux User Group, Founding Member and Co-chair, 2000-2002

University of Nebraska-Lincoln Outstanding Physics Teaching Assistant Award, 1994

Graduated Sigma Pi Sigma at University of Dallas, 1993

Society of Physics Students President, University of Dallas, 1991-1993

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References available upon request.