

Douglas D. Meredith

Computer Experience

4/05 – present Director of Geovisualization Initiatives, Department of Geography and Regional Development, University of Arizona, Tucson, AZ

Tasks include: development and management of the Geovisualization Laboratory's technological infrastructure; development of Web-based GIS data services; consultation and software development support for faculty and students; writing and co-writing grant proposals; coordination of community outreach GIS projects undertaken in the Geovisualization Lab by faculty and students; creation of content and curriculum for Web GIS course and short term training; instructor for existing GIS/computer cartography courses.

6/03 – 4/05 Founding partner of WorldWise Software, LLC, Fayetteville, AR

Founded to enable commercialization of GeoBlaze, a system for the Web-based dissemination of geodata. GeoBlaze was developed by myself and other designers through our work with the University of Arkansas. WorldWise Software was to be licensed by the University to resell instances of this software. May it rest in peace.

5/97 – 4/05 Center for Advanced Spatial Technologies (CAST), University of Arkansas, Fayetteville, AR

Design, development and enhancement of software to interface GIS and archaeological databases to the World Wide Web. Primary among these is GeoBlaze, a Java-based Web application providing query and download of geodata in user-specified data format and projection. This has provided extensive experience in Java technologies, both client and server side as well as JDBC and Oracle. My work at CAST has also provided valuable experience with Web server software (Apache, Jakarta, iPlanet, NCSA and Oracle Web Application Server), CGI programming, HTTP, HTML, Perl, Javascript, PL/SQL, and SQL. I have also shared system administration responsibilities for a mixed network of Windows, Sun Solaris, and Linux boxes.

6/87 – 5/96 AG Communication Systems (a joint venture between AT&T and GTE), Phoenix, AZ

5/94 - 5/96

Development of downloadable firmware for a multi-processor hardware card using DSP technology to provide ADSI telephony services. ADSI is a communications protocol that will allow specially equipped telephones to provide a GUI-based interface to voice-messaging and other features. This firmware was written in C for a Motorola 68340 processor. Development platform was a Pentium PC running Windows. Development tools included Microtec XRAY Debugger and EST Series 300 emulator.

7/92 - 5/94

Development of a LAPD emulation and black box test suite to run on a protocol analyzer. LAPD is a communications protocol associated with ISDN. The emulation and test suite were written in a hybrid of almost-ANSI C and a tokenized state-oriented language.

3/92 - 7/92

Development of MS-DOS version of WindowPhone. WindowPhone was a Windows-based product that made use of Caller-ID (via accessory hardware card) to provide sophisticated call management features to PC users. The MS-DOS version used Microsoft C++ and a commercial GUI package to provide the same functionality.

7/91-3/92

Development of load generation and offline debug tools. This was on an IBM PC platform using Borland C++ and MS-DOS batch files.

1/91 - 7/91

Field assignment with AT&T in Whippany, NJ. Development of management routines for non-volatile memory. Sun Workstation platform using C++. While there I recieved training in C, C++, and Object Oriented Design.

3/90 - 1/91

Tour of duty in Problem Isolation. Responsible for front-end analysis and investigation of problems reported from the field.

6/87 - 3/90

Kernel operating system software for a digital telephone switching system. Responsibilities included maintenance of existing software, debugging

support for field outages, and design of enhanced software to support new feature development. Primary software area was dynamic memory administration. Extensive programming in concurrent Pascal and 8086 assembly language. Development environment was split between HP/Apollo workstations and an IBM mainframe running TSO.

1/86 – 5/87 KSU Computing Activities, Kansas State University, Manhattan, KS

Student consultant/programmer.

Ecological Field Experience

6/96 – 8/96 University of Arkansas, Fayetteville, AR

Field Tech for research on the physiological ecology of timber rattlesnakes. Activities included temperature sensitive telemetry and mark/recapture.

9/94 – 8/95 Arizona State University West, Phoenix, AZ

Field Tech for research on the physiological and behavioral ecology of western diamondback rattlesnakes. Activities included temperature sensitive telemetry, mark/recapture, behavioral observation during spring emergence, time budget analysis, and lab processing.

4/94 – 8/94 Arizona Game and Fish Department, Phoenix, AZ

(volunteer)

Various projects including: mexican spotted owl survey, flammulated owl survey, riparian vegetation censusing, Chiricahau leopard frog survey, and Mexican wolf howling survey.

Teaching Experience

8/98 – 9/98 Department of the Interior, Mesa Verde National Park, CO

(contract position)

Climbing instructor and rope safety technician for a group of archaeologists working on erosion control in cliff dwellings within Mesa Verde National Park.

8/96 – 5/97 University of Arkansas, Fayetteville, AR

Teaching Assistant for Human Physiology.

10/90 – 5/92 Arizona Mountaineering Club, Phoenix, AZ (volunteer)
Climbing instructor for Basic Rock-climbing and Advanced Anchors and
Rope-work courses.

Education

M.A. in Biology (1999)
University of Arkansas, Fayetteville
GPA: 4.00

B.S. in Computer Science (1987)
cum laude
Kansas State University
GPA: 3.749

Honors

Academic:

National Merit Scholar
KSU Putnam Scholar
State of Kansas Honor Scholar
Dean's Honor List (three semesters during B.S.)
Graduated cum laude in my B.S.

Work related (from AGCS):

Performance Award -- for my part in a self-directed team that implemented
LAPD firmware.
Customer Service Award -- for providing quick, professional support in
debugging a major field outage.
Bull's Eye Award -- for discovering key information in field printouts that
enabled me to determine the cause of a major field outage.