David Ray Hoffpauir

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Vitae

Sr. GIS Programmer/Analyst I, Office of Research and Sponsored Programs (ORSP), Sam Houston State University, Huntsville, Tx. Current position since June, 2012.

Duties include:

• Geographic analysis and mapping in association with various University initiatives organized through the Office of Research and Sponsored Programs

These include:

- Mapping and analysis in association with the Institute for the Study of Invasive Species (ISIS)
- Mapping and analysis in association with the Texas Research Institute for Environmental Studies (TRIES)
- Mapping and analysis in association with the College of Criminal Justice
- Mapping and analysis in association with the Southeast Texas Applied Forensic Science Facility
- Mapping and analysis in association with the Houston Police Department Major Offenders Group Environmental Division
- Assistance to the Correctional Management Institute of Texas
- Assistance to the Sam Houston State University Campus-Wide GIS Initiative
- Assistance to the Sam Houston State University Facilities Management Division in development of their campus GIS mapping initiative
- Oversight of GIS graduate students employed by ORSP

Note: Many of the previous duties associated with LEMIT and the College of Criminal Justice are still valid

Programmer/Analyst I, Law Enforcement Management Institute of Texas (LEMIT), College of Criminal Justice, Sam Houston State University, Huntsville, Tx. September, 2005 to June 2012.

Duties include:

- Involved with all aspects of development, planning, and management for the Incident Command Simulation Training Program (INCOSIT)
- Development and maintenance of **Geographic Information System** resources including computer hardware, software, networking, systems maintenance, database development, and data procurement

- Course instruction in use of **Geographic Information Systems** for Emergency Management Operations
- Facilitation of **Geographic Information Systems** use in the Incident Command Training Facility
- Development of **Emergency Management** scenario based training for Law Enforcement, Emergency Responders, Teachers, Hospital Administrators, and Department of Criminal Justice
- New course development such as Emergency Operations Public Information Officer and Active Shooter Training
- Research assistance and **Geographic Information Systems** support for numerous graduate and faculty research projects (see **Publications and Presentations** section)
- Production, plotting, and printing of maps and associated large format documents
- **Development of publications** in association with the Institute for the Study of Violent Groups, College of Criminal Justice
- Liaison with Houston-Galveston Area Council of Governments **Geographic Information Development Committee**
- Development and production of **digital video** in association with LEMIT promotion and research initiatives
- Development of various **audio/ visual** components for LEMIT's Technology Center used in a online learning program
- **Planning Committee** member for the Southeast Texas Applied Forensic Science Facility (STAFS)
- STAFS duties have included development of technology used in monitoring of a human decomposition research facility, development of a forensic mapping component for short courses in forensic science, and mapping of the facility for planning, development, and research applications
- Collaterally assigned to the Sam Houston State University, Critical Incident Management Team as the **Planning Section Chief**

Programmer/Analyst I, Texas Research Institute for Environmental Studies (**TRIES**), Sam Houston State University, Huntsville, TX. September 1994-September 2005. <u>Duties included:</u>

- Proposal, grant, and report writing in association with various TRIES initiatives
- Development of faculty research databases in support of Geographic Information Systems projects using ORACLE, Microsoft SQL Server, Microsoft Access, ESRI's Spatial Data Engine, Visio 2000 data modeling tools
- Generation of digital map data using **Geographic Information System** software, global positioning equipment, overhead imagery, and map conversion techniques
- Involved with all aspects of development, planning, and management for the TRIES **Geographic Information Systems** Laboratory and the Sam Houston Visualization Laboratory from its inception, including equipment and software evaluation and purchase, personnel management, and project budgeting
- 3d modeling, visualization, storyboarding, script writing, direction, and production for various University short film projects

- University resource for application development, data analysis, and computer visualization through Office of Research and Sponsored Programs
- System, application, and network administration for Windows and UNIX (Silicon Graphics) computer operating platforms
- Development and maintenance of various internet homepages and geographic map data servers for both TRIES and the Office of Research and Sponsored Programs
- Management of software and hardware licensing as required for specific projects

Specific TRIES visualization and Geographic Information Systems projects:

- SPECTRO Virtual ICP Spectrophotometer'-SPECTRO Corp (3d Studio Max & Flash MX)
- 'Old Main- A Virtual Reconstruction' -SHSU (3d Studio Max, AutoCad, Adobe Premier)
- 'Today at the SHSU Visualization Laboratory'- Promotional Short (Adobe Premier, 3d Studio Max)
- 'Change Over Time-Lake Powell since the Last Ice Age'-SHSU (World Construction Set)
- 'Autonomous Underwater Vehicle'-SHSU (Maya, Adobe Premier, scripting & direction)
- Environmental Decision Support System-Fort Hood Military Reservation (database developer)
- Texas Army National Guard (GIS database developer)
- Camp Navajo National Guard Training Center (GIS database developer)
- Camp Gruber National Guard Training Center (GIS database developer)
- United Nations Environmental Program-Global Resources Information Database
- Walker County 911 (GIS database developer)
- Vegetation Mapping Protocol-Fort Hood Military Reservation
- **Seymour-Johnson AFB** (GIS project manager)
- Dare County Bombing Range (GIS project manager)
- **Dugway Proving Grounds** (GIS project manager)

Specific TRIES accomplishments:

- Organization and planning in association with the East Texas GIS Forum sponsored by TRIES and SHSU, 1995
- Instrumental in bringing corporate support to TRIES and SHSU through a software grant from ORACLE Corporation
- Instrumental in bringing corporate support to TRIES and SHSU though an equipment grant from Intergraph Corporation
- Instrumental in bringing corporate support to TRIES and SHSU through a software grant with Leica Geosytems
- Instrumental in bringing corporate support to TRIES and SHSU through a software grant with the Environmental Systems Research Institute (ESRI)
- University Contract manager for ESRI/SHSU agreement, 1996-2003

<u>Other duties:</u> Assignments with the **Office of Research and Sponsored Programs** have included development and maintenance of the departmental webpage, web pages for the Rural 2000 Education Consortium, and the Environmental Technology Development and Commercialization Center. Other assignments have involved various University collaborative efforts such as organization and planning for Rural 2000 Education Technology Conferences in 1996 and 1997, the Global Children's Foundation Conference in 1996, and planning and grant writing in association with rural

education initiatives involving Greenbrier High School, Greenbrier, AR, Region VI Education Service Center, and the Department of Education Challenge Grant Program. Other projects involved development of a Sharepoint Services Webportal for online document and report management. Faculty research support activities are detailed in the **Publications and Presentations** section of this vita.

PREVIOUS WORK EXPERIENCE

- Instructor, Lee College Prison Teaching Program, Huntsville, TX, 1993
- Teacher, Corrections Corporation of America, Cleveland, TX, 1992
- **Design / Project Engineer, Formers of Houston, Inc.**, Houston, TX. March 1991-September 1992
- Mechanical Designer, Micro-Engineering, Huntsville, TX, 1989-1990. This company manufactures diamond knives for electron microscopy thin sectioning and diamond surgical blades
- Supervisor/ Quality Control Inspector, U.S. Navy, 1977-1983 (active duty)
- Supervisor/ Quality Control Inspector, U.S. Navy, 1984-1999 (U.S. Navy Reserve)

TEACHING EXPERIENCE

- Sam Houston State University, Huntsville, Tx. Instructor, Law Enforcement Management Institute of Texas (LEMIT), Special Programs 2009-present.
 - "Forensic Mapping, Survey Methods, and Field Techniques"
- Sam Houston State University, Huntsville, TX. Instructor, Law Enforcement Management Institute of Texas (LEMIT), Incident Command Simulation Training Program (INCOSIT), 2005-present.
 - "Application of Geographic Information Systems for Emergency Response"
- Sam Houston State University, Huntsville, TX. Instructor, Geography, 1995 Lecturer in association Dr. Alan Williams GEO 475
 - "Data and Database Concepts for Geographic Information Systems"
 - "Data Mining for Geographic Information Systems"
 - "Geographic Positioning Systems (GPS) and Their Application to GIS"
- Sam Houston State University, Huntsville, TX. Instructor, Industrial Technology, Fall, 1994
 - "Drafting Fundamentals"
- Lee College Prison Teaching Program, Huntsville, TX. Instructor, Data Processing, Spring, 1993
 - "Computer Literacy"
 - "Application Software: WordPerfect, Lotus 123, dBase IV"
 - "Programming in Basic and Pascal"
- Corrections Corporation of America, Cleveland, TX. Teacher, Vocational Office Education, Fall, 1992
 - "Computer Literacy"
 - "Operating Systems and Application Software"
- U.S. Navy. Instructor (1984-1999)

APPOINTMENTS, AWARDS, AND ACHIEVEMENTS

- David Cameron/ IACP Environmental Crime of the Year Award, 2012. Presented by the International Association of Chiefs of Police (IACP) to the Collaborative Task Force investigating the Houston Police Department's illegal hazardous waste dumping case of March, 2012. Awarded, October 2012
- Chief of Police Commendation, City of Houston. Citation for assistance to the Environmental Crimes Unit during investigation of their largest ever illegal hazardous waste dumping case, March, 2012
- Collaterally assigned to the Sam Houston State University, Critical Incident Management Team as the **Planning Section Chief**, 2010
- **Planning Committee** member for the Southeast Texas Applied Forensic Science Facility, 2008-2011
- **Research Committee** member for the Southeast Texas Applied Forensic Science Facility, 2009-2011
- Liaison for SHSU agreement with **Houston Galveston Area Council of Governments (HGAC) Geographic Information Development Committee**, 2005 to present
- **State of Texas GIS Planning Council**. Appointment to the Governor's state-wide planning board for GIS implementation. Position held from 1995 to 2006
- **Technology Transfer Sub-Committee** of the State of Texas GIS Planning Council. Position held from 1995 to 2006
- Certificate of Appreciation- Central Texas School Safety Consortium. In support of the Texas Homeland Security Conference; School-Centered Emergency Management Plan. 2006
- Faculty Advisor- Omega Delta Tau, SHSU 2004-2005
- Co-founder SHSU ACM-SIGGRAPH Chapter, 2004 (Association for Computing Machinery-Society for Information Graphics)
- **Texas Academy of Sciences, Section Chair**. Past appointment to the planning board for Texas Academy of Sciences, Division of Geography and Geology, 1997-1998
- Texas Academy of Sciences, Section Vice-Chair. Past appointment to the coordinating board for Texas Academy of Sciences, Division of Geography and Geology, 1996-1997
- Co-founder of the East-Texas Intergraph Users Group, 1995
- Naval Reserve appointments to Command Assessment Team, Command Training Team, Command Retention Team, Divisional Career Counselor
- Sailor of the Quarter, Fighter Squadron 201, Naval Air Station, Dallas, Texas. 4th quarter, 1992
- Advisory Committee for the *Texas Review*, 1991
- President of the Industrial Technology Club, 1989
- Treasurer of the Industrial Technology Club, 1988
- Sailor of the Year, Fighter/Attack Squadron 204, Naval Air Station, New Orleans, 1987
- Sailor of the Quarter, Fighter/Attack Squadron 204, Naval Air Station, New Orleans, 3rd quarter, 1987
- Naval Reserve Retirement in January 1999

PUBLICATIONS AND PRESENTATIONS

Cited for **GIS/ Mapping Support-** Morgan, A. R., Smith-Herron, A. J., & Cook, J. L. (2013). Rapid Spread of Balclutha rubrostriata (Hemiptera: Cicadellidae) in Texas and Southwestern Louisiana, USA with Notes on its Associated Host Plants. *Florida Entomologist*, *96*(2), 477-481.

Cited for **Authorship**- Poster Presentation- *Geographic Selection Methodology for Placement of Invasive Emerald Ash Borer Trap Locations in Texas.* David R. Hoffpauir. Institute for the Study of Invasive Species (ISIS), May 2013.

Cited for **Co-Authorship-** Poster Presentation- *Use of Ground Penetrating Radar (GPR) to Detect Lost Graves in the Historically Black Section of Oakwood Cemetery, Huntsville, Texas.* Lila Rakozy, Sandra Rogers, and David R. Hoffpauir, May, 2013.

Cited for **Co-Authorship**- Technical Report- *Houston-Area Environmental Crime Incident Data: Description and Needs Assessment*. Nobles, Matt R., David R. Hoffpauir, and Jack M. Hill. Submitted to the Houston Police Department Major Offenders Division, Environmental Investigations Unit, July 2012.

Cited for **Co-Authorship**- Oral Presentation- *Evaluation of Parasitic Diseases of the Eurasian Collared-Dove and the Ecological Impacts on Native Dove Species*. Smith, Autumn J. and David R. Hoffpauir. Presented at the Texas Invasive Species Plant and Pest Conference, 2011.

Cited for Authorship- <u>Critical Incident Management and Geographically-based Systems.</u> International Journal of Applied Geospatial Research (IJAGR), An Official Publication of the Information Resources Management Association. David W. Webb, Phd and David R. Hoffpauir, M.A., 2010.

Peer Review- <u>Beyond Class Hours: the GIS Lab as a Center of Geographic Education.</u>
International Journal of Applied Geospatial Research (IJAGR), An Official Publication of the Information Resources Management Association, 2009.

Cited of **Dissertation** support- <u>The Social and Operational Intersections of Environmental Extremism in North America and Europe.</u> Doctorial dissertation, College of Criminal Justice, Sam Houston State University, Hasan Arslan, 2008.

Cited for **Dissertation** support- <u>Prevalence of White Collar Crimes in Turkey: Public Perception of Crime Seriousness, Victimization Rate, Citizens' Reporting Behaviors and Victim Characteristics. Doctorial dissertation, College of Criminal Justice, Sam Houston State University, Murat Sever, 2008.</u>

Cited for Master's **Thesis** support, *Police Use of Deadly Force*. Master Thesis, College of Criminal Justice, Sam Houston State University, Shankar Borua, 2008

Digital Video Production- <u>Center Mass: Police Use of Deadly Force</u>. Feature length film. A production of the Law Enforcement Management Institute of Texas, College of Criminal Justice, Sam Houston State University, Shankar Borua, Director, 2008

Oral Presentation- *Criminal Justice Applications of Geographic Information System.* Workshop for Criminal Justice Doctorial students, 2007.

Digital Video Production- <u>Make the Right Move.</u> Promotional video for the Incident Command Simulation Training Program, Law Enforcement Management Institute of Texas, College of Criminal Justice, Sam Houston State University, 2007

Oral Presentation- *Developing a School-Centered Emergency Management Plan.* Central Texas School Safety Consortium. In support of the Texas Homeland Security Conference, 2006

Oral Presentation- *Business Applications of Geographic Information Systems*. Presentation in association with Dr. Victor Sower, College of Business, Sam Houston State University, 2006.

Cited for **Authorship** and **Research Staff support**-<u>Extremist Groups: An International Compilation of Terrorist Organizations, Violent Political Groups, and Issue-Oriented Militatn Movements, 3rd Edition. Office of International Criminal Justice and the Institute for the Study of Violent Groups, Sam Houston State University, 2006</u>

Cited for **DISSERTATION** support- <u>Houston Area Calls for Service: An Analysis of Usage by Persons on Public Assistance</u>. Doctorial dissertation, College of Criminal Justice, Sam Houston State University, Robert Werling, 2005

Flash/ Director Production- *Virtual Instrument, Proof of Concept*, A Production of the Sam Houston Visualization Laboratory, 2005

Digital Video Production- Sam *Houston State University Faculty Interview Series*, A Production of the Sam Houston Visualization Laboratory, 2004.

Cited for GIS and logistics support- <u>Determination of Critical Habitat for the Endangered Nelson's Bighorn Sheep in Southern California</u>, Jack C. Turner, Charles L. Douglas, Cecil R. Hallum, Palu R. Kausman, and Rob Roy Ramey. Wildlife Society Bulletin 2004, 32(2):427-448

Digital Video Production- *Today at the Sam Houston State University Visualization Laboratory*, Producer/ Director, 2004

Digital Video Production- Old Main, A Virtual Reconstruction, Producer/ Director, 2004

Poster Presentation- *Old Main, A Digital Reconstruction*, Katy & E. Don Walker, Sr. Education Center, Sam Houston Memorial Museum, 2004

Oral Presentation- Technology Resources, Sam Houston State University Media Circus, Fall, 2003

Digital Video Production, sited for animation and production support- *Autonomous Underwater Vehicle*, Sam Houston Visualization Laboratory Production, 2003

Oral Presentation- Technology Resources, Sam Houston State University Media Circus, Fall, 2002

Cited for **DISSERTATION** support- An Investigation into Parent Involvement Strategies Employed by Principals in Bilingual Public Schools. Doctorial dissertation, College of Education, Sam Houston State University, John M. Barrera, 2002

Cited for **authorship**- *Implementation of the ArcHydro Data Model and the Spatial Data System at Fort Hood Army Reservation, Killeen, Texas*, Project Report to Army Corps of Engineers, Vicksburg, MS, 2001

Oral Presentation- GIS Application and Habitat Modeling for the Endangered Nelson's Bighorn Sheep. Presented at the Southwestern Association of Naturalists (SWAN) Conference, Cuernavaca, Mexico, 2001

Cited for support- *The Future of Farm to Market and Personal Transportation in Texas*. Richard D. Posey, Sunspider Corporation, 2000

Poster presentation- Fort Hood Military Reservation Environmental Data Support System. Presented at the National Hydrography Dataset Conference, 2000

Cited for mapping support- <u>Environmental Studies On Dugway Proving Ground Tooele County,</u> <u>Utah</u>. Texas Research Institute for Environmental Studies, Sam Houston State University, 1998

Cited for grant application **authorship**- <u>DATASITE: Data Analysis, Teacher Action and Support Infrastructure for a Technology-enhanced Environment</u>. Star Schools, Challenge Grant Program, Department of Education, 1997

Cited for **authorship**- *Fort Hood Hierarchical Classification System and Vegetation Map Workplan and Technical Design*. Texas Research Institute for Environmental Studies (TRIES), 1997

Oral Presentation: 'Environmental Assessment and Restoration Applications of GIS on Defense Department Facilities.' U.S. Intergraph Graphics Users Group, New Orleans, LA. September, 1996

Cited for technical support- <u>Camp Gruber National Guard Training Site: Wetlands Deliniation</u> <u>Report</u>. Texas Regional Institute for Environmental Studies, Sam Houston State University, 1996

Cited for support as a member of the sub-committee for *Standards and Technology Transfer* of the Texas GIS Planning Council. <u>Getting Started in GIS: A GIS Primer for Texas State Agencies.</u> Texas GIS Planning Council, 1996

Cited for support as a member of the sub-committee for *Standards and Technology Transfer* of the Texas GIS Planning Council. *A GIS Resource Manual*. Texas GIS Planning Council, 1996

Oral Presentation: 'Data Mining for Geographic Information Systems.' Sam Houston State University, Huntsville, TX. Short course presentation in association with Office of Naval Research Symposium, 1995

Cited for support as a member of the <u>Texas Review</u> Advisory Committee. Sam Houston State University, 1991

Cited for **authorship**-Writings selected for publication in the <u>Sam Houston Review</u>. Sam Houston State University, 1990

EDUCATION

Master of Science, Applied Geography. Sam Houston State University- Currently enrolled. Major emphasis in Geographic Information Systems and Forensic Mapping. Projected graduation December, 2014.

Graduate Geographic Information Systems Certificate. Sam Houston State University. Completion of Graduate Certificate requirements. Awarded March 2013.

Master of Arts, Technology. Sam Houston State University-1994. Major emphasis in Computer Aided Design (CAD) and Geographic Information Systems. Graduate Minor in Education

Bachelor of Science, Industrial Technology. Sam Houston State University-1989. Major emphasis in design and development with minors in Art and English

Graduate Fellowship, Texas Regional Institute for Environmental Studies, Sam Houston State University, Spring and Summer Semesters, 1994

PROFESSIONAL DEVELOPMENT EDUCATION AND CERTIFICATIONS

- **Certification: WebEOC Administration.** WebEOC is a web-enabled crisis information management system, ESi Acquisition Inc., Augusta, GA, 2009.
- **Incident Response to Terrorist Bombings.** Energetic Materials Research and Testing Center, New Mexico Tech, 2009.
- **Prevention of and Response to Suicide Bombing Incidents.** Energetic Materials Research and Testing Center, New Mexico Tech, 2009.
- Computer Aided Management of Emergency Operations. National Center for Biomedical Research and Training, Academy of Counter-Terrorist Education, Louisiana State University, 2008
- **GIS & the National Incident Management System.** National Spill Control School, Texas A&M University, 2007
- National Incident Management System. Completion for levels 100, 200, 700, & 800. Department of Homeland Security, 2006
- Microsoft Sharepoint Server Services. Pilothouse, 2005
- **Introduction to ArcSDE Using ArcInfo.** Environmental Systems Research Institute, 2001
- **Photo Interpretation for Managers.** Texas Natural Resources Information System (TNRIS) workshop, completed 1998
- Aerial Photo Interpretation for Digital Orthphotoquad Users. Texas Natural Resources Information System (TNRIS) workshop, completed 1998
- Certification: Systems Analyst-Designer 2000, Oracle Masters Certification, Oracle Educational Services. 160-class hour program. Completed 1997
- Certification: Designer and Developer-Designer 2000, Oracle Masters Certification, Oracle Educational Services. 136-class hour program. Completed 1997
- Intergraph Modular Geographic Environment (MGE) and Intergraph Education courses. Over 200 class-hours in Intergraph software products. Completed 1996
- Supporting Microsoft Windows NT 4.0 Core Technologies, Intergraph Corporation, 1996

• Certification: Database Administration, Oracle Masters Certification, Oracle Educational Services. 168-class hour program in database planning, management, and administration. Completed 1996

U.S. NAVY TRAINING- SCHOOLS AND COURSES

- * Survival Equipmentman (Parachute Rigger) class "A" -school
- * Leadership, Management, Education, and Training -school
- * Naval Instructor -school
- * Command Assessment -school
- * Equal Opportunity in the Navy-course
- * Career Information -school
- * Aviator's Breathing Oxygen Test Site Analyst-school
- * Work Center Supervisor -school
- * Corrosion Control -school
- * Shipboard Fire Fighting-course
- * Aircraft Fire Fighting-course
- * Quality Control Supervisor -school
- * Work Center Management –school

SOFTWARE EXPERIENCE

Operating Systems:

UNIX-Irix, Windows-DOS to Present

Animation, Visualization, CAD, Imaging, and Modeling Software: Proficiency with 3d Studio Max, Maya, Rhino 3d, Adobe Photoshop, Adobe Illustrator, Adobe Premiere, Vegas, AutoCad, Microstation, Macromedia Studio MX, Voxel Analyst, I-RAS Imaging/ Remote Sensing Software. Familiarity with Lightwave 3d, Macromedia Director, Macromedia Flash, Avid

GIS Software:

Proficiency with ArcGIS Suite, ArcInfo, ArcView 3, Arc Spatial Data Engine (SDE) ERDAS Imagine, MicroStation Modular Geographic Environment (MGE), GEOMEDIA, World Construction Set, MapInfo

Office Application Software:

Microsoft Office Applications: (Powerpoint, Access, Word, Excel, Project, Sharepoint, Visio) *Internet Applications Software and Languages:* ORACLE Webserver, Apache Webserver-ARC/IMS (Internet Mapping Software), Microsoft Internet Information Server, Microsoft Front Page, Netscape, Microsoft Internet Explorer, HTML

Database Software:

Proficiency with ORACLE, Personal ORACLE, ORACLE Workgroup Server, ORACLE Enterprise Manager, ORACLE Base Runtime for Intergraph-Relational Interface System (RIS), ORACLE Workgroup 2000, Designer/Developer 2000, ORACLE 7 CDE bundle for Unix, CASE Development Tools, ORACLE Media Objects, ORACLE Spatial Data Option. Familiarity with ORACLE Visual Image Retrieval System, ORACLE Image Server, ORACLE Video Server, dBase IV, Microsoft Access, Visio 2000 Enterprise Edition, and Microsoft SQL Server

Game Engine Programming:

Familiarity with UNREAL, DOOM, & Quake III game engines. Familiarity with object modeling, lighting techniques, texturing, physics engines, and file conversion from 3D Studio Max into the various game engine environments.